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ANALYTICAL RESEARCH ON UNIFIED PROCUREMENT

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CGSC. 1947-48.

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Report Documentation Page				Form Approved OMB No. 0704-0188	
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1. REPORT DATE <b>1948</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-1948 to 00-00-1948</b>	
4. TITLE AND SUBTITLE <b>Analytical Research on Unified Procurement</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Army Command and General Staff College, 100 Stimson Ave, Fort Leavenworth, KS, 66027</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>68</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			



JUN 21 1965

## ANALYTICAL RESEARCH ON UNIFIED PROCUREMENT

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ANALYTIC RESEARCH

ON

UNIFIED PROCUREMENT

## PREFACE

THE PURPOSE OF THIS RESEARCH IS TO REVIEW THE WORLD  
WAR II AND POSTWAR ORGANIZATIONS AND PROCEDURES FOR UNIFIED  
PROCUREMENT AND TO DEDUCE CONCLUSIONS AND RECOMMENDATIONS.

UNIFIED    PROCUREMENT

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UNIFIED PROCUREMENT

A. Introduction:

1. It can be assumed that in a future war, as in World War II, not only will war be a giant consumer of our industrial resources but also industry will be as vital to victory. And with a production ceiling limiting our supply it behooves everyone to take cognizance of this fact and plan and work for an efficient system of demand from industry. Unified procurement rationally and logically is the first step towards the conservation and efficient use of our industrial resources.

SECTION I

ORGANIZATION FOR PROCUREMENT - WORLD WAR II

A. Introduction:

2. During the early stages of World War II the military services recognized procurement as a function but the organizations within the services operated independently in their own field of commodity specialization. However, as the war developed and efficiency and conservation became in demand a great effort was maintained to coordinate procurement within each service and between services.

B. War Department

3. The Army Service Forces in conjunction with the Army Air Forces were responsible for procurement during most of the war period. The Army Service Forces exercised direct command authority over the seven operating technical services engaged in the procurement of supplies and equipment for the Army. The Army Air Forces were responsible for the procurement of items "peculiar" to the Air Force.

4. The operations of the War Department organization as depicted in the attached chart (Exhibit i) may be presented briefly as follows:

a. The Under Secretary of War established procurement policies and directed the supervision of procurement through the medium of lower echelon command organizations.

b. These lower echelon command organizations were respectively the Army Service Forces and the Army Air Forces, who directed and supervised the procurement activities of the seven Army Service Forces technical services and the Army Air Forces procurement organization, the Air Technical Service Command.

c. Functional relations with the War Department General and Special Staff and other governmental agencies provided the various data, and the coordination required to assure efficient functioning.

5. The seven technical services and the Air Technical Service Command were the basic division of procurement responsibility within the War Department. The several operating agencies specialized in its own particular type of commodities and maintained procurement offices in various cities of the United States. There were fundamental differences among the operating agencies since the procurement function was the most important responsibility of only three, and the procurement burden of all agencies varied in degrees of magnitude. The operating agencies were similar in the tendency to give separate attention to the function of research, procurement, and distribution; decentralizing the actual purchase of supplies outside of Washington; and in the competition which existed between the procurement function and commodity specialization.

#### C. Navy Department.

6. The Commander-in-Chief, U. S. Fleet and Chief of Naval Operations were charged by the Secretary of the Navy with the preparation, readiness, and logistic support of the operating forces. In the Office of the Vice Chief of Naval Operations an organization was pro-

vided to formulate logistical plans from the broad strategical plans and to direct the Navy Bureaus in their procurement function. As a part of the Office of the Assistant Secretary of the Navy, the Office of Procurement and Material was created to coordinate all procurement policies and procedures and to provide one point of contact for the Navy Department with all civilian war agencies.

7. Similar to the Technical Services of the War Department, the Technical Bureaus of the Navy Department provided all of the Navy requirements and each bureau was responsible for particular commodity types.

8. The bulk of the Navy Departments procurement was centralized in the bureaus in Washington, D. C., and the inspection of all Navy Department procurement was centralized under the Material Inspection Service.

9. The attached chart (Exhibit 2) depicts the Navy Department's organization for procurement.

#### D. Joint Chiefs of Staff.

10. The organization of the Joint Chiefs of Staff was not similar to either the War or Navy Departments as it consisted of a number of committees. The Joint Strategic Survey Committee was the top ranking Committee and was charged with broad strategy and national policy. The Joint Staff Planners came directly under the Joint Strategic Survey Committee in the chain of developing plans. Joint Strategic Survey Committee in the chain of developing plans. They were charged with the preparation of joint war plans and with plans concerning the combined employment of United Nations forces.

11. In addition to the above there were three other committees which were more closely connected with procurement. The Joint Military Transportation Committee rendered decisions on the requirements for ships in collaboration with the Maritime Commission; the Army-Navy Petroleum Board determined the requirements for petroleum; and the Joint Logistics Committee was the primary logistical advisory

and planning agency for the Joint Chiefs of Staff.

12. The procedures used by these Committees are related in Section IV of this research.

E. Army-Navy Munitions Board.

13. The Army-Navy Munitions Board before the war was organized only to carry out the responsibility of planning for industrial mobilization. With the declaration of war the work of the Board changed to staff and operating problems in various fields, including priorities, material controls, tooling up industry, and construction controls. However, with the creation of the civilian war agencies the Board transferred by the summer of 1942 most of its power and responsibilities to these agencies, mainly the War Production Board. The Army-Navy Munitions Board continued during most of the war to act only in certain matters of clearances and priorities for the War and Navy Depts.

## SECTION II

### UNIFIED PROCUREMENT - WORLD WAR II

A. Introduction:

14. During World War II and shortly thereafter approximately ninety percent of the items common to the War and Navy Departments were procured under a unified system.

B. Unified Procurement.

15. Three methods were involved to obtain joint procurement of commodities:

a. The first was joint purchasing, where the requirements, the personnel, and the facilities of the agencies were merged, and a joint contract resulted. The best example was the Joint Army and Navy Procurement Agency for the procurement of medical supplies and surgical supplies in New York City.

b. Another method was collaborative purchasing, where officers of each agency, the Army or the Navy occupy adjoining offices and make separate contracts. Access to both parties was rendered very easily by their physical layout. The objective was to center in one place geographically all the operations which pertained to a particular commodity. The best example of this was the purchase of clothing and textiles in New York City.

c. The other method was cross procurement; that is, one agency buying the entire requirement. The best examples of this were in the procurement of subsistence, lumber, and petroleum.

16. Besides commodities there were many parts and steps to procurement that attempts were made toward unification mainly by committee action between the War and Navy Departments. These were specifications, contracts, negotiations, readjustments, etc.

17. The major function of the Joint Chiefs of Staff was to formulate strategic and operational plans. During the war many of these plans were formulated in sufficient time to allow for procurement planning. Hence the first step in unified procurement was accomplished.

18. The war civilian agencies, mainly the War Production Board, also contributed heavily to unified procurement.

### SECTION III

#### ORGANIZATION FOR PROCUREMENT - POSTWAR

##### A. War Department.

19. The Under Secretary of War is responsible for the making of procurement policies, and the direction of supervision over procurement and related industrial matters. Acting directly under the Under Secretary of War, the Director of Service, Supply and Procurement functions in a key position with the general mission of supervising and coordinating the procurement and related activities of the Army Air Forces

and the technical services. Together with the Army Air Forces, the technical services continue to do the actual work of procuring for the Army, under the direct supervision of the Director of Service Supply and Procurement, who translates the broad policies of the Under Secretary of War into more detailed directives. The attached chart (Exhibit 3) exemplifies this organization.

B. Navy Department.

20. The Navy postwar procurement organization provides within its framework for the three main phases of the problem. These are: (1) the determination of requirements; (2) coordination of the bureaus' purchasing, production, inspection, and control; (3) the operating procurement function. The functions are assigned respectively to the Chief of Naval Operations, Material Division within the Assistant Secretary's Office, and the technical bureaus. The important significant fact to note in connection with the organization for postwar procurement is that the organizational framework has been set up to provide for the accomplishment of all functions necessary in wartime, thus avoiding a complete organizational shake-up in the event of an emergency. A chart of the Navy postwar organization is attached as Exhibit 4.

C. Army-Navy Munitions Board.

21. The Army-Navy Munitions Board lies between the Services, with three members; a civilian chairman, the Under Secretary of War and the Assistant Secretary of the Navy. The routine of the Board and its operational functions are administered by an Executive Committee consisting of the civilian chairman of the Board assisted by two deputies, one a general officer of the Army, and one a flag officer of the Navy. The executive committee is assisted by a staff of about fifty Army and Navy officers, and civil service employees drawn from the two departments. In policy matters, the Board is advised by a committee made up of the Chief of Staff of the Army,

the Chief of the Army Air Forces, and the Director of SS & P, WD General Staff, and the Chief of Naval Operations, the Deputy Chief of Naval Operations for Air, the Chief of the Material Division, Executive Officer of the Secretary of the Navy.

D. Joint Chiefs of Staff.

22. In June 1943 the President disapproved a charter which would have been the basis of the organization of the Joint Chiefs of Staff. The President declined to approve this charter because he desired the Joint Chiefs to have all the initiative they needed and not be limited by any charter. However, the Joint Chiefs operated more or less on the basis of this Charter during World War II and will probably continue to do so during the present until major changes in military organization are made. Hence the organization and functions of the Joint Chiefs of Staff at present are the same as during World War II. (Section 1 D 10)

E. Treasury Department.

23. On 1 June 1939, Directors' Order 71, issued pursuant to the authority of Executive Order 6166 and approved by the Secretary of the Treasury and by the President, stipulated the extent to which the Director of Procurement of the Treasury Department would undertake to procure for Federal agencies or to procure specific types of supplies and services. However, this order specifically exempted the War and Navy Departments from the provisions of the order. Nevertheless it is quite possible that in connection with items of common use, used by the Army and Navy, as well as the civilian services, that the requirements of the Army and Navy may alternately be included in the Treasury Departments program.

SECTION IV

UNIFIED PROCUREMENT - POSTWAR

A. Army-Navy Munitions Board.

24. The basis for unified procurement during the present period rests in the directive to the Army-Navy Munitions Board. This board, which has its chairman a civilian, is working toward the goal of unifying all possible procurement generally by the methods of joint purchase, collaborative procurement and cross procurement. However, this task is slow and needs thorough study as the beginning of unified procurement commences in the standardization of the equipment of the services. This is a touchy problem, as the services may want a basic item such as a radio, but at the same time each service will want the radio to function under the conditions prevailing in their specific sphere of operations resulting in an actual requirement for three different designs.

B. Joint Chiefs of Staff.

25. As long as the Joint Chiefs of Staff stay in existence there will be coordination in procurement planning and determination of requirements. For the present the part played by the Joint Chiefs cannot be visualized as very great, as there is no requirement for overall strategic and operational plans. However, in case of an emergency either in the shortage of manpower or in an international crisis, the Joint Chiefs will insure the coordination that was obtained during World War II.

C. Problem and Progress.

26. A great deal has been accomplished in the unification of procurement, especially in the field of purchasing. However, the greatest necessity today lies in the field of requirements, in the designation of items, in provision of an adequate catalog, in contracts and contract procedures and in the realm of standards, which includes specifications and all that it implies.

D. Future Plans for Unified Procurement.

27. With the advent of atomic energy, guided missiles, shortages

of critical material and the Merger Plan, much thought has been given to procurement in the future. Many plans have been suggested but all seem to have the common trend of a central control agency over numerous operating agencies. The concensus of opinion is that one organization cannot handle the procurement of all services.

## SECTION V

### CONCLUSIONS AND RECOMMENDATIONS

#### A. Conclusions on Organization for Procurement.

28. The present line of action of procurement, originating in the plans of the Joint Chiefs of Staff, coordinated by the Army and Navy Munitions Board, further coordinated by the planning divisions of the War and Navy Departments, and ending with the procuring by the Technical Services, the Bureaus, and the Army Air Force, is sound.

29. The Joint Chiefs of Staff or a similar organization is mandatory to insure the proper coordination of the military services in planning for procurement.

30. The Army-Navy Munitions Board or similar organization is mandatory to insure the proper coordination of the military services in actual procurement and in their relations with industry.

31. Within each service procurement is recognized as an important function, but none has organized functionally so that the procurement of all commodities or products is done by one agency.

32. Procurement organization must continue to recognize commodity differentiations.

33. The Bureaus, Technical Services and Army Air Forces are efficient and effective purchasing and production agencies.

34. The centralization of procurement in Washington is sound.

35. The organization of the military services with reference to procurement and related functions should be such as could be readily expanded from a peace to war basis. To prevent experimentation and improvisation after an emergency arises, the procurement organization should not be merely planned but should actually function in peacetime.

36. There is no one best organization applicable to the entire field of military procurement.

37. The procurement activity of the military services should not be placed entirely in the hands of a civilian agency.

38. Every phase of America's industrial life should be directed by one or more organizations to mobilize efficiently in time of war.

39. Far more significant than mere organization are the personalities involved and the powers given to them. Poor organization furnishes the background for waste, conflict of authority, struggles for power, and inefficiency. But human beings give the life and realism to an organization rather than detailed line Charts. This is an important criterion. Cognizance of this fact must be taken and consideration given to the training of personnel for procurement.

#### B. Conclusions on Unified Procurement.

40. Most joint or coordinated procurement during World War II was the result of expedients, personal initiative, or the actions of boards and committees. It was achieved to meet specific problems and followed no consistent pattern.

41. The principle of solving joint procurement by committee or board action is sound, as no one organization can possibly coordinate the entire field of procurement.

42. The long range policy of joint procurement should be that any item common to all services should be procured by one service.

43. The Joint Chiefs of Staff and the Army-Navy Munitions Board are essential to unified procurement.

44. The unification of standards and specifications are the initial steps in solving the problem of joint procurement.

45. There must be a preplanned system to allocate facilities and materials to obtain equalization between the procuring agencies.

46. There should be a common catalogue of all Army and Navy items, and this catalogue should as far as possible correspond to the terms used by manufacturers and sellers.

47. Governmental contract placement procedures should be standard for all purchasing agencies.

48. The standardization of government contract forms is essential to insure benefit to purchasing agencies and contractors.

49. There should be uniformity between the services in the policies and procedures of pricing, accounting, auditing, appeals, patents, insurance and financing.

50. The military services should have a uniform inspection service, based on the Navy Departments system.

51. There is a great need of uniformity in stock control and inventory procedures of the services.

52. Civilian agencies with military service representatives should control the systems of allocating transportation, power and fuel, strategic and critical material, foreign resources, production, machine tools, manpower and priorities.

53. The Contract Settlement Act of 1944, applying to War Contracts only, provides an excellent example of carefully planned and prepared legislation which served, to a high degree, all the purposes for which it was intended.

54. To obtain conservation in time of war and peace and to stay within our production ceiling in time of war, unified procurement of the military services is indispensable.

C. Recommendations on Organization for Procurement.

55. That organizational changes be made to provide competent guidance with respect to practicability and feasibility of procurement to the strategic planners coincident with the development of their plans.

56. That the Joint Chiefs of Staff be continued as a permanent agency for the determination of national strategic requirements on which the War and Navy Departments can base their procurement objectives.

57. That no reorganization be made that would transfer the authority and responsibility for actual procurement of munitions from the technical services and bureaus of the armed forces.

58. That the Army-Navy Munitions Board be continued as a permanent agency for the coordination of procurement between the War and Navy Departments.

59. That the centralization of procurement in Washington be continued.

60. That so far as practicable, the peacetime procurement organizations be based on organizational requirements for operation under full scale industrial mobilization, and be capable of rapid expansion without necessity for major structural changes.

61. That the activity of procurement should not be placed in one organization.

62. That the procurement activity should not be placed in a civilian agency.

63. That civilian agencies should be created in emergencies to direct the mobilization of all phases of industrial life.

64. That men be regularly trained in the procurement system and routine, in order to build up a nucleus of an emergency logistics

organization that can be quickly expanded.

D. Recommendations on Unified Procurement.

65. That the achievement of joint or unified procurement be placed on a continuing basis.

66. That the committees and boards established to unify procurement be made permanent organizations.

67. That the policy of unified procurement be to eliminate all duplications of purchases of similar items.

68. That the Army-Navy Munitions Board be placed at the same level as the Joint Chiefs of Staff.

69. That the committees on joint standards and specifications be continued and given the authority to direct changes in any agency.

70. That the Army-Navy Munitions board contain in their Industrial Mobilization Plan a preplanned allocation of facilities and materials for the procuring agencies in case of an emergency.

71. That a common catalogue be established for all Federal agencies.

72. That contract placement procedures and forms be made standard for all Federal agencies.

73. That manuals be written and enforced so that the policies and procedures of pricing, accounting, auditing, appeals, patents, insurance, and financing, will be standard for all Federal agencies.

74. That one inspection service be established for each Federal agency and that the inspection services coordinate their activities to eliminate duplication.

75. That the stock control and inventory procedures of all Federal agencies be standard.

76. That the military services plan the Civilian agencies which in emergencies will control the allocation of transportation, power and

fuel, strategic and critical materials, foreign resources, production, machine tools, manpower, and priorities.

77. That all essential legislation be prepared in advance of an emergency to insure that the demand on industry is presented and controlled in the most efficient manner.

78. That all possible means of conservation be enforced.

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### ORGANIZATION FOR PROCUREMENT - WORLD WAR II

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## SECTION I

### ORGANIZATION FOR PROCUREMENT - WORLD WAR II

#### A. WAR DEPARTMENT

##### 1. General.

The organization of the War Department for procurement was inadequate before World War II as the procuring agencies were responsible to two bosses. The Under Secretary of War was responsible for supervision of procurement and related activities, and in this capacity dealt directly and separately with the technical services. The Assistant Chief of Staff, G-4, War Dept. General Staff, was responsible for establishing the broad basis and allowances used in determining requirements, and for the broad basis and allowances for storage, transportation, distribution and issue of supplies and equipment; and likewise dealt directly and separately with the technical services on these phases of the supply process. The reorganization of the War Department in March 1942 changed this situation by the creation of an Army Service Forces having the technical services under its supervision. Hence the technical services which formerly reported to the Under Secretary and the General Staff, had to report only to the Army Service Forces. However, the Army Service Forces exercised its procurement functions under the supervision of the Under Secretary and its operating functions concerning requirements, storages and issue under the General Staff.

##### 2. Under Secretary of War.

The overall supervision of the War Department procurement structure was a function of the Under Secretary of War, who established policies for, directed, and supervised the War Departments' activities with respect to procurement and related matters, including industrial mobilization and demobilization; coordinated the activities of the Army Air Forces, Army Service Forces, and other War Department agencies with reference thereto; coordinated these War Department activities with interdepartmental agencies and super-agencies; represented the Secretary of War on boards, commissions and committees pertaining to procurement and related matters; and coordinated industrial mobilization and demobilization with other agencies of the government including the Congress, appropriate non-governmental agencies, the public and the press.

##### 3. General Staff.

The logistical and strategic planning of the General Staff was translated into basic data required for the computation of material requirements and issued to the Army Air Forces and the Army Service Forces generally in the following forms:

- a. The War Department Troop Deployment
- b. The War Department Supply Supplement to the Troop Deployment.
- c. Special Operational Projects.
- d. Certain approved War Department replacement factors.
- e. The types of military supplies required for use by the Army.
- f. Other special instructions relating to military requirements.

##### 4. Army Service Forces.

War Department Circular No. 59, 1942 outlined in detail and assigned the general procurement responsibilities of the War Department to the Commanding Generals of the Army Service Forces and the Army Air Forces. This circular stated the procurement mission of the Army Service Forces as follows:

- a. To procure supplies and equipment to meet Army military require-

ments (except those peculiar to the Army Air Forces).

b. To procure supplies and equipment for Lend - Lease, Navy, and others in accordance with requirements submitted to these agencies. The Under Secretary of War looked to the Commanding General, Army Service Forces for the procurement of his procurement responsibilities. On general economic and legal questions the Commanding General preferred to have the Under Secretary fix basic policies. Questions of public relations and of legislative relations involving the Army Service Forces were always handled by the Under Secretary. The Chief of Staff regarded the Commanding General, Army Service Forces as his principal advisor on supply matters. The operational responsibilities for procurement were delegated by Army Service Forces to the seven technical services. Supervision of all phases of procurement operations, however, remained a prime Army Service Forces function. Army Service Forces had functional relationships on procurement matters with the Office of Strategic Services, the Treasury Department, War Production Board and many others.

## 5. Technical Services.

a. Procurement responsibility was divided among the technical services by type of commodity purchase. Their names largely indicated the type of supply which was bought. The Ordnance Department procured small arms, artillery, fire control instruments, ammunition and all types of motor vehicles, including tanks and motor gun carriages. The Quartermaster Corps procured food, fuels and lubricants, clothing and all general supplies. The Signal Corps bought communications equipment; the Corps of Engineers construction equipment and supplies, demolition supplies, and assault boats for local river crossings; the Medical Department all types of medical supplies; the Chemical Warfare Service incendiary bombs, Chemical agents, protective clothing and supplies, and smoke equipment; the Transportation Corps railway rolling stock, rails, and harbor equipment, including small marine craft.

b. There were two fundamental differences among the technical services. For one thing, procurement was the most important operating responsibility of only three of the seven technical services - the Ordnance Department, the Quartermaster Corps and the Chemical Warfare Service. On the other hand, the Surgeon General was principally concerned with the supervision of medical service throughout the Army; the Chief of Transportation operated both inland and overseas transportation service for the Army, while the Chief of Engineers had construction and property maintenance responsibilities of great importance. The Chief Signal Officer stood in between. His procurement job was sizeable and at the same time he operated the Army Communications Service and the Army Photographic Service. In the second place, as far as procurement was concerned there were great disparities in the magnitude of the procurement burden of each technical service. In the fiscal year ending 30 June 1945 the dollar volume of Ordnance procurement came to 11.6 billion dollars, fifty percent of the procurement of all seven technical services. Purchases by the Quartermaster Corps amounted to 6.5 billion dollars or 30 percent of the total. Thus two services, Ordnance and Quartermaster between them accounted for 80 percent of the total procurement for all technical services.

c. These differences in responsibility and in procurement operations were naturally reflected in the internal organization of technical services. Thus the principal worries of the Ordnance Department throughout the war were the development of new material, the procurement of Ordnance supplies, and their storage, distribution and maintenance. Accordingly, the three major divisions of the Office of the Chief of Ordnance were a Research and Development Service, an Industrial Service, and a Field Service. But even in the Ordnance Department there was a constant pressure for commodity specialization to achieve separate recognition from the procurement function. Thus the Tank Automotive Center located in Detroit assumed responsibility for the research and development, the procurement, and the storage and distribution of all tank and automotive equipment. The Office of the Quartermaster General in Washington went through a different organizational history. Here the situation was complicated by the traditional method of Quartermaster

procurement which gave commodity specialization to individual depots scattered throughout the United States. For example, the Boston depot was the center for shoe procurement throughout the country. The Office of the Quartermaster General in Washington early assigned the responsibility for supervision of all phases of depot operations to a single division. Then late in 1942 and early 1943 a functional organization developed, differentiating research and development, including the determination of military requirements, procurement supervision. But commodity pressures once again brought a change in this pattern. Subsistence procurement became so large and so vital that a separate subsistence division was created in Washington to coordinate the marketing centers. This subsistence division tended to supervise all research and development, procurement and distribution of food supplies. Likewise in 1943 a Fuels and Lubricants Division was set up. This resulted in leaving in the Office of the Quartermaster only the handling of clothing, textiles, and general supplies on a functional basis. The Office of the Chief of Chemical Warfare Service was organized functionally, differentiating a Technical Division, an Industrial Division, and a Supply Division. The Chief of Engineers, the Chief Signal Officer, the Surgeon General, and the Chief of Transportation lumped their supply activities as simply one phase of their responsibilities. There are three important aspects about the organization of the office of each Chief of Technical service. In the first place, the procurement function competed for recognition with commodity specialization; in the second place, there was a tendency to give separate attention to the functions of research, procurement, and distribution; and in the third place, the actual purchase of supplies, involving the letting of contracts, all subsequent relations with contractors, and the storage operation were handled outside of Washington.

d. Geographical decentralization was the pattern for the field procurement operations of the technical services. The Ordnance Department maintained 13 district offices throughout World War II. An Ordnance district office purchased small arms, artillery, and the component parts of ammunition. The district offices had no responsibility for the supervision of Ordnance arsenals or of government-owned, contractor-operated plants. Powder plants and ammunition loading plants likewise fell outside the jurisdiction of Ordnance district offices. Also the Office of Chief of Ordnance - Detroit, supervised the procurement of automotive and tank equipment on a centralized basis throughout the United States. The Signal Corps likewise was geographically organized, with the Philadelphia depot purchasing telephone supplies, wire, and radio equipment; and Fort Monmouth was the center not only of electronics research but of electronics procurement. The Chemical Warfare Service had six procurement offices located in Boston, New York, Pittsburgh, Chicago, San Francisco and Dallas. However, there was a trend toward commodity specialization among these offices. Thus the New York office became the center for relations with the Chemical industry as a whole. The Medical Department had a single procurement office in New York City with the St. Louis depot serving as a sub-procurement office. The Chief of Transportation located the bulk of his procurement supervisory force in Cincinnati. New York and Cincinnati divided between them the purchase of rail supplies and boats. San Francisco and Chicago participated in the procurement of marine equipment. The Corps of Engineers first in 1943 established 10 Engineer procurement divisions, still utilizing the district offices facilities set up for construction but with a district chain of command. In 1945 procurement was for the most part assigned to division Engineer office S. The Quartermaster General began the war with a traditional arrangement whereby depots purchased types of commodities on a nation wide basis. Separate market centers handled the local procurement of food under the general direction of the subsistence office located at the Chicago depot. Due to criticism of the arrangement the Quartermaster General established procurement districts in his more important depots such as Atlanta, Kansas City, San Antonio, and Oakland to serve as administrative areas for local procurement directed by parent depots in Boston, Philadelphia or Chicago.

## 6. Army Air Force.

Authority was delegated by the Under Secretary of War to the Army Air Forces to procure aeronautical and other equipment peculiar to the Army Air Forces. Within the Air Force headquarters the Office of Material and Services was responsible for policy making and supervision of Army Air Forces procurement. The Air Technical Service Command located at Wright Field was

was charged with the actual procurement responsibility. All Air Force procurement in peacetime and during the early months of the war was centralized at Wright Field. In the summer of 1943, the first decentralization steps were taken by directing districts to set up contracting organizations. In general only the smaller type procurement was sent to the districts for contracting; all large contracts and all contracts with large Air Force manufacturers continued to be let by Wright Field. No set method of allocating procurements to the districts was followed, reliance being largely placed on the prior knowledge of Wright Field contracting personnel to see that the procuring authorization was sent to the proper district. During the fall and winter and into the spring of 1944, a relatively large number of contracts were placed by the districts, thus relieving Wright Field of much of the contracting that undoubtedly would have been backlogged by them. By the spring of 1944, the number of new procurements had fallen off and Wright Field began to assume the load that had formerly been sent to the districts. This trend to again centralize at Wright Field continued through the rest of 1944, and by the beginning of 1945 almost all contracts were being placed by Wright Field.

## B. NAVY DEPARTMENT.

### 7. General.

In January 1942, the Under Secretary of the Navy reorganized the Navy's procurement machinery. On 30 January 1942, by General Order of the President, the Office of Procurement and Material was established under the cognizance of the Under Secretary of the Navy. This organization became the principal coordinating agency in the Navy Department with respect to procurement policies and procedures. Thus in January 1942, the procurement system functioned as follows:

a. Operations plans and basic plans were originated in the Headquarters, Commander-in-Chief, United States Fleet and Chief of Naval Operations.

b. These plans were broken down in terms of requirements of what, where, and when by the Office of the Vice Chief of Naval Operation.

c. The Vice Chief of Naval Operations issued the requisite directives to the bureaus, each of which was in itself the procurement agency for the particular types of end items for which it had responsibility for procurement. The bureaus broke down the Vice Chief of Naval Operations requirements into items of end products required.

d. The actual contracting was done by the bureaus which, in a limited sense, are self-contained procurement agencies within their own technical fields.

### 8. Assistant Secretary of the Navy.

The assistant Secretary develops the logistics of procurement or "how", involving policy, procedure and collaboration with the Chief of Naval Operations, the bureaus and civilian war agencies.

### 9. Chief of Naval Operations.

The Chief of Naval Operations was charged with the dual task of operations of the Fleet and the strategic planning relative to operations; and logistic planning and support necessary to maintain the Fleet and its operation.

### 10. Vice Chief of Naval Operations.

The Vice Chief was charged with the implementation of the plans and policies of the Chief of Naval Operations with respect to the preparation, readiness and logistic support of the operating forces, and was responsible for the control of all naval logistics and direction of the work of the bureaus in the execution of these plans.

## 11. Office of Procurement and Material.

The Office of Procurement and Material developed overall coordinated procurement policies and procedures; provided statistical data for presenting requirements to the War Production Board; administered the controlled materials plan; represented the Navy in dealing with all civilian agencies of the government and the War Department; and issued directives and instructions relating to procurement. In addition, this office administered the Material Inspection Service, U. S. Navy. Although technical personnel was furnished by the bureaus where needed, all operations relative to the inspection of naval material were administered by the Office of Procurement and Material.

## 12. Bureaus.

a. The technical bureaus divided the procurement responsibility among themselves by the types of commodity purchased. Their names generally indicate the types of supplies they bought. The Bureau of Aeronautics procured aircraft and necessary accessories. The Bureau of Ships procured hulls, machinery and associated equipment for naval vessels except Ordnance equipment. The Bureau of Ordnance procured all offensive and defensive armament for ships and aircraft. The Bureau of Supplies and Accounts procured provisions, clothing, fuel, lubricants, and items common to two or more bureaus. The Bureau of Yards and Docks procured material for public works and utilities of the Naval Shore Establishment and for the construction and operation of advanced bases. The Bureau of Medicine and Surgery procured medical supplies and equipment.

b. The bureaus principally concerned with the procurement of military goods had a general similarity in structure. Each was organized along functional lines with divisions for research and design, procurement, maintenance, finance, administration planning, etc. Each division was composed of appropriate commodity and functional sections.

c. The great bulk of naval procurement was accomplished in the bureaus at Washington. This was in contrast to the policy of decentralization procurement employed by the War Department. Notable exceptions to this policy were these: all medical supplies were purchased by a central office in New York under the cognizance of the Bureau of Medicine and Surgery; clothing was purchased by the Naval Clothing Factory at Brooklyn under the cognizance of the Bureau of Supplies and Accounts; about 90% of all provisions were procured through the Army; all supplies for advanced bases and depots were procured through a Chicago office under cognizance of the Bureau of Yards and Docks. The centralized system of procurement is particularly adapted to Naval use where the principal problem is the procurement of components for ships, aircraft and ordnance. The characteristics of each component is directly effected by the characteristics of the ship or aircraft in which it will be installed, which required the closest cooperation between the various procuring bureaus.

## 13. Marine Corps and Coast Guard.

The Marine Corps performed most all of its own procurement centrally through its Quartermaster General's Office in Washington. Occasionally certain purchasing was delegated to the Quartermaster Depots in Philadelphia and San Francisco. Items common to the Marine Corps, the Army and the Navy were procured either from the Army or Navy by means of requisitions with an exchange of funds.

The Coast Guard obtained the bulk of its requirement from Navy sources.

## C. JOINT CHIEFS OF STAFF.

### 14. General.

The staff elements of the Joint Chiefs are not based on either Army or Navy idea of what a staff should be. There is no single head of any of the staff divisions. All of the staff divisions are committees and the result is that all action is committee action, where from four to six people get around a table and decide what to do; and there is no one boss who can tell them what to do if there is an argument. There is no general staff set up to supervise work of special staffs. All the committees, except the Joint Strategic Survey Committee, which is the one top staff echelon, are on the same level.

## 15. Committees.

a. The Joint Strategic Survey Committee was the top Joint Chiefs of Staff Committee. It was a very high ranking committee and was charged with broad strategy and with recommendations concerning national policy.

b. The Joint Staff Planners which includes the War Plans Com. were directly under the Strategic Survey Committee in the chain of developing plans. They were charged with the preparation of joint war plans and with plans concerning the combined employment of United Nations forces.

c. The Joint Military Transportation Committee was charged with being concerned with all matters concerning military overseas transportation.

d. The Army and Navy Petroleum Board was charged with effecting close cooperation between the services on all matters pertaining to petroleum, petroleum products, and all associated matters.

e. The Joint Logistics Committee was charged with giving the Joint Chiefs the logistical aspects and implications of plans or commitments, with advising other agencies of the Joint Chiefs and of the War and Navy Departments of logistic plans and requirements and with developing logistical plans to implement strategical and operational plans developed by the War Plans Committee.

## D. ARMY - NAVY MUNITIONS BOARD.

### 16. General.

The Army - Navy Munitions Board before the War was organized only to carry out the responsibility of planning for industrial mobilization. With the declaration of war the work of the Board changed to staff and operating problems in various fields, including priorities, material controls, tooling up industry, and construction controls. However, with the creation of the civilian war agencies the Board transferred by the summer of 1942 most of its power and responsibilities to these agencies, mainly the War Production Board. The Army-Navy Munitions Board continued during most of the war to act only in certain matters of clearance and priorities for the War and Navy Departments.

## SECTION II

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## SECTION II

### UNIFIED PROCUREMENT - WORLD WAR II

#### A. INTRODUCTION.

##### 17. General.

Failure on the part of the Armed Services to coordinate procurement has been the cause of serious concern to the Congress for the past twenty-five years. The remedial measures which have been proposed have varied from merger to deprivation of the procurement function altogether and assigning it to another agency. A consciousness of these deficiencies has actuated the services toward improvement from time to time. This has been especially marked in World War II.

#### B. UNIFIED PROCUREMENT.

##### 18. Commodity Purchasing.

###### a. Joint Purchasing.

With reference to purchasing, three methods have been involved. The first is joint purchasing, where the requirements, the personnel and the facilities of the agencies have been merged, and a joint contract results. The best example is the joint Army and Navy medical procurement agency for the procurement of medical supplies and surgical supplies in New York City.

###### b. Collaborative Purchasing.

Another method was collaborative purchasing, where officers of each agency, the Army or the Navy, occupy adjoining offices and make separate contracts. The best example of this was the purchasing of clothing and textiles in New York City by the establishment of the Army - Navy Purchasing office. It was found that certain manufacturers had been reserving their entire output for the Army or the Navy. Others came into the picture only occasionally. Combined action allowed an exchange of information on contract procedures and costs, and permitted the contracting officers of both departments to have combined knowledge of experience, reliability and capabilities of the manufacturers. In the case of common items it became possible to determine the relative urgency of the requirements for the two services, and to allocate output in such a manner as to prevent critical shortages. Industry was benefited by this service, by having one central office to go to for full information on all matters related to the supply of clothing and textiles to the Army and Navy.

###### c. Cross Procurement.

The other method was cross procurement; that is, one agency buying the entire requirement. The subsistence program was one of the best examples of combined buying for the Army and Navy. During 1944 and 1945, the Army purchased 80 to 90% of the subsistence supplies for the Navy and Marine Corps, thus eliminating competition and the necessity of carrying reserve stocks by each service. The importance and complexity of the procurement problem of Quartermaster Class 1 supply was so great that an understanding of how the Quartermaster General handled this problem is of value. The Quartermaster General set up in his office during World War II a separate commodity division that is the Subsistence Division to handle the procurement. Subsistence has several characteristics that must be kept in mind if we are to understand its procurement:

1. It is a "must" item. Every soldier must have three meals a day, starting the day he reports at camp and continuing until the day he is discharged.

2. All subsistence is perishable. Its keeping qualities vary with the items and with the conditions under which it is stored. Inventories must be kept as low as possible to still insure the supply. While we speak of perishables and non perishable subsistence; as a matter of fact, all of it is subject to constant deterioration.

3. Subsistence is an item of great interest three times a day, not only to military personnel, but also to every inhabitant of the United States. We must consequently take action to take out the supply necessary for the military with the least possible impact on the civilian supply.

4. Price ceilings must be observed if the cost of living is not to rise sharply. The civilian population does not need an airplane or a tank or a machine gun in time of war, but it does need subsistence three times a day.

5. Subsistence supplies must be obtained as close to the point of production as possible, to prevent dislocations in the trade and to place as much of the price as close to the producer as possible, where it will serve to stimulate production.

6. Seasonally produced items, such as canned goods, dairy products and poultry products, must be taken during the season of production, to insure adequate supplies for the Military and to prevent dislocation of the civil supply.

The Quartermaster General established the depot market center system to supply the military. Central purchasing depots for non-perishables were established at New York, Chicago and San Francisco, each being charged with those commodities for which those cities were the usual commercial headquarters. New York was charged with the procurement of all sugar, coffee, spices, and similar items. Chicago purchased all canned meats, canned vegetables, cereals and special rations. San Francisco was responsible for the purchase of all canned fruits. Each of the central depots operated as a purchasing agent for the others on those supplies not charged to it for procurement. A market center headquarters was established in Chicago, separately from the Chicago Depot, which purchased the non-perishables, to supervise the procurement of all perishable supplies through 37 market centers located throughout the United States, and with one in Canada for the supply of the Northwest Service Command. The market centers were located conveniently for the supply of the troops in their areas and were connected with the market center headquarters in Chicago by teletype. They purchased supplies locally when they were available and when it was advantageous for the Govt.

The forwarding of refrigerated supplies overseas was controlled by the market centers in the ports, which retained the responsibility for the supplies to the docks alongside the ships. When supplies are sent overseas, the proportion of each item that is sent determines the menu that must be issued. It becomes necessary, if the subsistence supply is to be satisfactory, to make up standard menus, which serve as the basis for subsistence requirements. These menus, and the requirement for subsistence, will constantly change due to the facilities that are available overseas to care for perishable supplies and to the type and activity of combat. This constant change in requirements required the placing of contracts only so far in advance as was necessary to insure production and to obtain the maximum flexibility in supply.

#### d. Other Examples of Coordination.

1. A considerable degree of procurement coordination between the Ordnance Department and the Bureau of Ordnance has developed informally over a long period of time, exemplified by arrangements by a single service in the field of small arms, ammunition and many components parts of larger pieces.

2. In the aeronautical field the Army Air Force and the Bureau of Aeronautics cooperated effectively on the procurement of air frames, engines, propellers, high octane gas, etc., the items making up 76% of the aeronautical program for the two services.

3. The Central Procuring Agency staffed by Army and Navy officers was created to purchase lumber nationally and to allocate it between the Army and Navy.

4. The Army and Navy Petroleum Board coordinated the procurement of the Army and the Navy for fuel and lubricants.

5. Electronic procurement was coordinated under the Joint Communications Board through its Procurement Precedence of Supplies, Material and Equipment Committee, which formulated a precedence list.

6. Anti-friction bearings, wire rope, cotton broad woven fabrics, truck and bus tires, rockets, dry cell batteries, ammunition brass and many items in short supply (in addition to steel, copper and aluminium) were fields in which requirements and procurement were coordinated.

7. The Ordnance Department produced almost all the powder and explosives for both services and practically all trucks were bought by the Ordnance.

#### 19. Purchasing Policies and Procedures.

##### a. General.

While the war contractor is by far the most vital cog in the procurement machine, too often during World War II he tended to be a "forgotten man". The need for greater coordination and uniformity and less duplication and overlapping between and within procurement agencies had been pleaded earnestly by numerous contractors themselves. Many have complained bitterly that the so-called production "miracle" of the last war was accomplished not because, but in spite, of the procurement organizations then existent and the confusion, inefficiency and unfairness resulting from inadequate coordination between and within services. Much attention had been given to the organization of the top coordinating echelons involved in procurement. Inadequate attention appears to have been given to the relationship of contractor with Government, the most important link in the procurement chain. Apparently, few persons in authority have taken a contractor's eye view of this relationship in its many aspects.

##### b. Contract Placement.

The first major function in the field of purchasing is the placement of contracts; that is, the selection of contractors and the timing of placements. The policy in this field was largely coordinated because it was prescribed by higher authority; for example, the First and Second War Powers Acts covered purchase policies applicable to both War and Navy Departments. Again War Production Board Directive No. 2 set forth the relative importance of the so-called "factors in contract placement" used by both departments. The War Manpower Commission determined "labor areas" used as a guide in contract placement by both departments. The Smaller War Plants Corporation worked with both departments in the encouraging placement of contracts with smaller concerns, thereby implementing policies set forth in War Production Board directive No. 2. Finally the Office of War Mobilization and Reconversion issued directive applicable to both departments; for example, directives relating to contract placement during the reconversion phase were decentralized in the War Department and throughout the war the Purchase Division, ASF and the Procurement Branch, Office of Procurement and Materials of the Navy Department, consulted informally to coordinate placement policies. War Department Procurement Regulation 2 and Navy Department Procurement Directive No. 2 indicate clearly the extent of the coordination effected. Nevertheless, efforts to coordinate interpretation or implementation of policy were spasmodic and informal. This, plus organizational differences, resulted in slightly different methods of approach. Both Departments issued directives regarding the timing of contract placement with the object of shortening commitments without sacrificing necessary lead time, but there was no evidence of effort at uniform implementation or application.

##### c. Contract Pricing.

Contract pricing is another purchasing function which occurs early in the contracting process. Both departments emphasize use of fixed-price contracts and close pricing through cost analysis to encourage efficient use of manpower, material and money, and as a substitute for peacetime competition. Pricing operations were decentralized in the War Department and relatively centralized in the Navy Department. However, in the field of company pricing coordination was effected by joint agreement between the Departments. The coordination of individual contract pricing depended upon less formal arrangement at the operating level and upon individual initiative. There was inadequate coordination at the staff or policy level regarding contingency allowances, rebates from subcontractors, exceptions from re-negotiation, "target price" incentive contract and exemption from OPA price control. At the operating level, there was a lack of systematic procedures for exchange of information on prices and costs which could and did prevent the best pricing and caused duplication of effort.

#### d. Contract Forms and Articles.

As to the forms and articles or clauses used for contracts except for special isolated instances the two Departments promulgated and approved contract provisions and forms with little or no regard to those issued by the other. In some exceptional cases there has been a conscious effort at unification. In other cases contractors who obtained special forms or articles from one Department requested and obtained the same of similar article from the other Department. Legal personnel in the procurement organizations of the two Departments coordinated to some extent, but whereas the War Department uses certain standard forms which may be varied within limits, the Navy Department had no formally prescribed standard forms. It had certain approved clauses and each bureau had more or less standard forms for its own use, but big contracts were tailor-made and the bureaus had much discretion in working out contract provisions. A few forms have been prepared jointly, for example, forms covering training units, CPFF storage contracts for termination inventory and the contract articles used in termination pursuant to the Joint Termination Regulation. Joint consultation took place regarding clauses covering patents, escalation after OPA ceiling changes, re-negotiation, and re-pricing. Inadequate coordination as to forms handicapped both contractors and the Government. Many contractors were forced to make detailed study of at least two different forms of long and complicated contracts covering identical or similar items of material.

#### e. Loans.

The next important purchasing function during World War II was that of providing capital to contractors. In making guaranteed V and T-loans the Departments agreed on common policies and forms and issued instructions to the Federal Reserve System Banks jointly. They allocated contractors to the agencies having major interest to guarantee such financing and worked together through joint committees. With respect to advance payment, however, the coordination was less close because of differences in internal organization of the Departments. Nevertheless, termination financing for both Departments was covered in the Joint Termination Regulation. In spite of joint efforts certain differences remained.

#### f. Insurance.

Regarding insurance related to procurement the Departments attained substantial uniformity of policy and that one staff could easily perform functions for both Departments if procurement for both were under one authority. Some differences did exist but they were largely in method rather than policy.

#### g. Auditing.

The next function of purchasing is contract auditing. Various steps were taken to coordinate auditing activities of the two Departments. For example, thirty SPFF contractors working for both Departments were assigned to the one with the major interest for auditing purposes. To simplify termination accounting work the Departments assigned thirty-one of the major contractors to the individual offices which performed for both Departments. The JTR included a joint termination accounting manual which established uniform terminating accounting practices. In a number of large industrial areas, Audit Coordinating Committees worked to coordinate termination accounting and

and exchange of data. Despite such efforts important divergencies continued, including special auditing manuals containing different policies and principles as to allowable costs. Furthermore, the two Departments had in joint official channel to coordinate their relations with the General Accounting Office.

#### h. Re-Negotiation.

A very notable success in coordination as to policy, procedure and even in the details of forms was achieved by the Departments in regard to their responsibilities under the Renegotiation Act for recovery of so-called "excessive profits". The high degree of uniformity and coordination resulted from a series of successive steps. In 1942, when the Renegotiation Act was first passed, informal coordination was effected by assignment of each contractor subject to renegotiation to the Department and to the service having predominant monetary interest in the contractors total business for a previous year. Informal meetings between the Under Secretaries and Price Adjustment Boards of the two Departments and the adoption of a joint statement of principles carried coordination further. Statutory authority and responsibility for coordination on renegotiation policy and procedure resulted from the creation, in February 1944, by Congress of a War Contracts Price Adjustment Board. The Price Adjustment Boards of each Department also included a member from the Board of the other Department.

#### i. Contract termination.

In the field of contract termination policies and procedures the Departments developed a high degree of coordination. The War and Navy Departments in 1944 decided to adopt a single set of instructions applying both to Army services and Navy bureaus involved in contract termination. In November 1944 the Joint Termination Regulations and the Joint Termination Accounting Manual were issued and efforts were made to insure uniform interpretation of the Joint Regulations. The regulations provides for a consolidated termination program whereby selected contractors are assigned to a particular War Department service or Navy Bureau for field accounting review and for disposition of termination inventory. Local termination coordination committees were set up in some sixteen large industrial areas having a number of local procurement offices. Joint training of personnel to be assigned to termination activities was carried out at the Industrial College. The experience in termination, like that in renegotiation, showed just how far policies, procedures and detailed regulations of the two Departments could be consolidated without any change in the organizations of the two Departments. The success in these fields makes clear the fact that the word "coordination" need not be confused with "integration" of operating organizations. The advantage of having a single document for regulation of termination activities, with the resulting saving of time, simplicity and fairness, are obvious. The idea could be copied to good purpose in other functional areas without any substantial changes in organization.

#### j. Surplus property.

In the field of surplus property disposal both Departments have been subject to the Surplus Property Act of 1944, and the regulations of the War Assets Administration and its several predecessors in the surplus property policy-making field. As a result, the Departments follow the same price policy and report their surpluses to the same disposal agencies according to the same regulations.

#### k. Appeals and patents.

Regarding contract appeals, patents related to contracts, and mandatory procurement powers coordination had been carried out in certain aspects but much more should be done.

### 20. Coordination in Other Fields.

#### a. Allocation.

One of the concepts of the Industrial Mobilization Plan of 1939 called for the allocation of manufacturers to one service or the other, or to both in some cases for the manufacture of specific products. Some twenty thousand plants in the United States had been surveyed by the Army and Navy

Munitions Board so that what a company could make, how much it could make, and what machinery it had to make it with was well known. Lists were in hand ready to be implemented on M-Day, but they never were used as intended. M-Day really happened long before Pearl Harbor. Plants which had been allocated to the Army or the Navy were being given business from abroad and frequently filled to capacity before our Army or Navy had appropriations to place business with them. By the summer of 1941, the allocation scheme was outmoded due to the situation existing in the country at the time and the realization that the productive facilities of the country had to be augmented in all directions to take care of the munitions load, which was increasing month by month. However, the studies made of the various plants were of inestimable value to the procurement officers of the Army and Navy, and while the plan had been abandoned a great deal of allocation was done at the working levels by informal agreement.

b. Facilities and Construction.

It became apparent very shortly after the emergency descended upon us, that the industrial facilities existing in the country were entirely inadequate to produce the munitions needed for the global war. The coordination between the Army and the Navy in regard to facilities needed for production was anything but complete in the early stages of the war. In some fields coordination was unnecessary, as for example, Army arsenals and Navy shipbuilding establishments. In other fields there was quite complete coordination as for airplanes where Army Air Forces and the Bureau of Aeronautics had joint interest in facilities expansions. There were many cases of interchange of facilities among the services. All came about by close coordination at headquarters where information was exchanged, needs developed and final paper work adjusted. The Facilities Committee set up by the War Production Board and having representatives from the Army, Navy, Maritime Commission, Smaller War Plants, War Manpower Commission and the War Production Board reviewed facilities expansions costing over \$500,000. The review covered primarily the essentiality of the projects, although the proposed location was examined from the point of view of availability of manpower, and of the power needed by the equipment. Before coming up to the Facilities Committee, the possibility of using facilities made available by changes of program was inquired into by the sponsoring agent. In one field of the Facilities and Construction program, there was complete coordination between the services. This was the Army-Navy Munitions Board "List of Prohibited Items for Construction Work". It was prepared and maintained in joint sessions between the Production Division of Army Service Forces and the Production Branch of the Office of Procurement and Materials of the Navy. At these joint sessions, materials and Products Specialists as well as representatives of the Corps of Engineers and Bureau of Yard and Docks, presented their recommendations from which the list was formulated. This list controlled both command and industrial construction.

c. Machine Tools.

One aspect of the munitions program where the Army and Navy coordinated quite fully was that of machine tools and plant equipment. The foresight of the Army and Navy Munitions Board Machine Tool Committee was responsible in large measures for getting the Machine Tool Program underway in time to avert disaster. Organized in the early 1930's, this committee formulated plans for the expansion and control of the machine tool industry in time of war. With the assistance of industry the capacity of all machine tool builders was tabulated and their possibilities for expansion analyzed; standard nomenclature in catalogue form was initiated, and some progress made in the elimination of odd and unnecessary sizes of items. In light of later developments, these plans were rather elementary and quite inadequate for total war. Particularly valuable, however, were the contacts made between the Army and Navy and the leaders of the industry. As is well known, the procedure for procuring war material in this war did not follow a prescribed plan, and it was therefore necessary for those responsible for plant equipment to rely on their own general estimates of future requirements. When definite programs were laid down, a large volume order for machine tools could be placed. For instance, when the Thousand Bomber authorization was made, the Air Forces through the medium of the Defense Plant Corporation placed orders for 200 million dollars of machine tools. Shortly after this it was believed wise to expand facilities for the manufacture of all types and sizes of tools. The composite judgment of officers of the Army and Navy, War Production Board and the machine

tool industry determined the extent of the expansion. Officers in the Machine Tool Division of the ANMB had realized the forthcoming demand for machine tools must be anticipated by expanding the capacity of the machine tool industry through the placing of substantial, firm orders. Accordingly the Army and the Navy, though without appropriations for the purpose entered into facilities and supply contracts with a considerable number of tool builders late in 1940 and early in 1941. Defense Plant Corporation had been organized in August 1940. Its function was to finance facility and supply contracts using funds provided by the Reconstruction Finance Corporation. In February 1941, it made 35 million dollars available for tools. Later that was followed by 200 million dollars for the Thousand Bomber Program. In two and one-half years it entered into some 750 contracts for tools to the value of nearly two billion dollars. Of the nearly two billion dollars in pool orders for tools, it was estimated that cancellation costs amounted to about nine million dollars. This very excellent job of buying machine tools by DPC had the benefit of the Army's and the Navy's extensive knowledge and its success was due in no small measure to their participation. The Machine Tool Division of the ANMB maintained close records of all pool orders and issued reports of their status. Thus it was possible not only to check production of tools under pool orders but to control their manufacture and distribution, curtailing or cancelling if indicated. The success of the entire operation reflected the cooperative and coordination between the services, WPB and DPC.

#### d. Specifications.

Except for specifications on aeronautical material, Army Specifications and Navy Department Specifications had been prepared separately for years with practically no coordination until a Joint Army - Navy Committee on Specifications was created in December 1942 by a directive signed by General Somervelle and Admiral Robinson. AAF and Bureau of Aeronautical Specifications are not included in the purview of this committee. The efforts of the committee brought forth some fruit and there was technical specification coordination in respect to a number of items such as electronic tubes, textiles, chemicals, plastics and photographic material. For a variety of reasons, the work of this committee was not pushed as it should have been. Only 127 joint specifications were promulgated in the first two years of the committee's life, although they covered thousands of items. A new organization was established immediately after the war. The common interest in specifications relating to aeronautical material was recognized by the Army Air Forces and the Bureau of Aeronautics as early as 1927. A program of ANA specifications was launched then, and it has continued to be active ever since.

#### e. Inspection.

Closely connected with the matter of specifications was the matter of inspection of materials and components purchased under these specifications. Coordination of inspection between the Army and the Navy was made very difficult because of the differences in inspection policy in the Army Service Forces and the Navy. These differences existed in a great many fields such as subcontract inspection, contractors' Certificate of Compliance, differences in scope of duties in naval inspection offices and ASF Technical Services officers, inspection forms, etc. At the operating level there was very good coordination, particularly on items covered by JAN specifications or ANA specifications. On such items no technical difficulties were involved, but the inspection policy differences mentioned above complicated the taking over of inspection by one service for the other. However, a great deal was accomplished in this area. For instance, the Signal Corps and the Bureau of Ships divided inspection of certain electronic material; the Petroleum Section of the Bureau of Ships and the Fuels and Lubricants Section of Army Quartermaster Corps divided inspection of petroleum products. Complete coordination was achieved in the inspection of strictly aeronautical material between the AAF and the Bureaus of Aeronautics. There was such differences in inspection policy on the whole that in summary plant by plant coordination was about all that could be done during the war.

#### f. Packing and Packaging.

Efforts to coordinate the packaging function early in the war around June 1942 were carried out by the Container Coordinating Committee of the Army, Navy, Army Air Forces, WPB, Lend-Lease, ODT, WSA, and WFA, Treasury Department. The committee was established to coordinate the policies of the

various agencies in regard to the use of containers and packaging materials for domestic and overseas shipments before most of the services and bureaus had packaging staffs. It prepared several manuals and packaging specifications which contained excellent material. The net results of the committee's action were rather weak, however, as it had no authority to enforce coordination, and when packaging sections were established in the various bureaus and services they did not actively support the committee. Each bureau and service had full authority over packaging of the material under its cognizance. Consequently, due to a variety of reasons including ignorance and desire for autonomy, policies varied from accepting "Commercial packing" to the specification of packaging which was overly elaborate and expensive. Conditions improved as reports came in from the fighting fronts and verifications of the conditions existing was made by packing specialists from the procuring agencies. Finally in the latter part of 1944, a Navy Packaging Board and an Army Packaging Board was set up by the Navy and ASF respectively and early in 1945 a Joint Army-Navy Packaging Board was established. The individual service boards were composed for the most part of packing specialists, as was the Joint Board. The coordination of the work of these three Boards was excellent and resulted in Joint Army-Navy Specifications and Packaging Instructions. Problems of packaging were attacked from an over-all War and Navy Department aspect, rather than from an Army Service or Navy Bureau point of view, and this esprit de service had much to do with speeding up the work. Chiefs of Navy bureaus and Army technical services cooperated fully in the work of the boards and insisted on the same full cooperation from everyone under their command. By the end of 1945 practically all procurement common to the Army and Navy was standardized as to preservation, packing and packaging procedures.

g. Conservation.

Most of the work done by conservation groups in the two services was in regard to materials. The Conservation Committee of the AN MB provided the principal means of joint action in conserving critical materials until August 1942, when the committee ceased to function actively as such. Informal cooperation continued between the conservation Branch in ASF and the Conservation directives were exchanged and frequently discussed prior to issuance. Conservation groups in the two services were instrumental in getting joint action on specifications and packaging under way. Lists of critical materials were published by the Army, Navy and the War Production Board, though often they were not identical. It was only near the end of the war that a combined "Critical Materials List" was issued. The conservation personnel assisted in the preparation of the "List of Prohibited Items for Construction Work". The Army and Navy groups cooperated in issuing procedures in regard to reclamation work in the fields such as salvaging lumber, reworking critical components, and reclaiming petroleum products. The best example of coordination in conservation was that of the Operating Committee on Aircraft Materials Conservation. This committee made a definite contribution to aircraft production. It had representatives from the Army Air Forces, Bureau of Aeronautics and the War Production Board. Set up in 1942, it issued some 100 mandatory directives and bulletins to the aircraft industry as the sole agency acting on joint conservation problems and succeeded in obtaining cooperation from all parties.

h. Manpower.

Coordination between the Army and Navy on manpower was, on the whole, continuous, effective and harmonious. There was complete interchange of information between the parallel organizations of both departments on all matters of common interest. Directives and instructions were exchanged; ideas concerning basic policy positions were discussed informally and usually resulted in the issuance of similar policy instructions on labor supply and labor relations matters. It was continuously emphasized at conferences and in operating instructions that Army and Navy representatives should attempt to reconcile any competing manpower demands before any committee meeting with other agencies. It was inevitable that there should be competition between the Army and Navy for manpower, since both services were major claimants for what was available. Directives from the Joint Chiefs of Staff as to the relative importance of top programs resulted in the acquiescence by one service to the prior claim of the other. Although both Services vigorously pursued the common aim of obtaining the manpower necessary to meet production objectives, there were no major instances where conflicts were not settled either at the department level or in the field.

## i. Common Nomenclature and Stock Control.

Except in the few cases where Joint Army and Navy specifications were produced little was accomplished between the Departments to produce a standard nomenclature for similar items. In stock control procedures no attempts were made towards unifying their systems.

## 21. The Joint Chiefs of Staff.

a. There were various functions of the Joint Chiefs of Staff which were related to military procurement during World War II. First was the function concerning strategy and operations in U. S. Theaters. A casual glance at that function does not indicate a very close connection with military procurement. However, closer analysis shows that it was closely tied with military procurement. If there was sufficient time and unlimited resources, the plans of the Joint Chiefs concerning strategy and operations were used as the basis for procurement. If there was not sufficient time to get out these plans sufficiently early to guide procurement, then the operational plans that were developed were based on the procurement that was planned. There are a number of examples of how plans affected procurement during the war and of how procurement affected plans. The strategic concept of the island-hopping war in the Pacific led to the placing of procurement programs for numerous amphibious weapons and vehicles and jungle equipment. The strategic plan for the Operations in Europe led to major changes in the placing in procurement programs of a great many heavy trucks, railroad equipment and other types of material that had not been planned before. The very date of the landing in Normandy was based on studies of the availability of resources. Another interesting example, was the course of events in the Pacific. There was a question as to whether the attack would be launched through Luzon or through Formosa. Actually the decision was based almost entirely upon the availability of resources. It was found that there were not enough resources available for the Formosa attack, and therefore the approach to Japan was made through Luzon.

b. The second major function of the Joint Chiefs was that of advising the President of requirements, production and allocation of munitions and shipping. That would appear to put the Joint Chiefs right in the procurement job. It was, however, never so interpreted, and the Joint Chiefs, except for a few bottleneck items, did not make recommendations as to procurement of items. They did allocate end products that came from procurement programs and had a special committee set up for such allocation between the Army, the Navy and the Air Force. Throughout the war they indicated requirements for procurement but these indications were very broad and a lot of had to be done in the services in computed detailed requirements. The requirements would be in terms of troops to be employed and bases to be organized and developed. They did get into procurement concerning certain bottleneck products. The building of ships by the Maritime Commission was the principle example, the construction of ships being based directly on the needs of the Joint Chiefs of Staff to export military forces and supplies. No major changes in the ship-building program could be made without consultations with the Joint Chiefs. Other bottleneck items came up for review and recommendation, usually as a result of a request for recommendations from the Director of War Mobilization. Studies were made in this respect, on the need for aircraft, the need for aviation gasoline, the need for bombs and other items, where the Director of War Mobilization thought perhaps the Departments were asking for too much or where requirements were conflicting with some other requirements and the Director wanted a decision from the Joint Chiefs as to which should take precedence.

## 22. Civilian Agencies.

### a. Establishment of the Agencies.

On January 16, 1942 the President of the United States authorized the formation of the War Production Board, which was designed to establish a point of authority and coordination over war production except for petroleum and prices. The responsibility of petroleum was placed under the Secretary of Interior and prices under the Office of Price Administration. Other civilian agencies at this time shifted from a national defense to a wartime basis. A War Manpower Commission, and a War Shipping Administration were established to control their respective fields. A Smaller Plants Corporation

was established by Act of Congress to assist small business in making an adjustment from peace to war. A Petroleum Administration for War and a Solid Fuels Administration for War were established. The rubber crises led to the development of a semi-autonomous Office of the Rubber Director within the War Production Board. And a National Housing Agency was established to more effectively combat the housing shortage. The Office of Defense Transportation was set up to control transportation. The Defense Plants Corporation; WPB Facilities Committee, Reconversion Finance Corporation, were established to aid in their respective fields. The Lend-Lease and foreign procurement activities and the control of imports and exports passed from various agencies into a Foreign Economic Administration reporting direct to the President. The Office of War Information likewise reporting to the President had been established to coordinate information activities at home and to assist the military agencies in development of an information program directed at occupied and enemy countries. The President transferred the priorities powers relating to food and foodstuffs from the WPB to a War Food Administration established within the Department of Agriculture. By the end of 1943 the principal wartime agencies had been established; but it was also clear by the end of this period that WPB lacked the authority and responsibility to exercise direction over those aspects of the economy which related to the conduct of economic controls necessary for war. The President, therefore, faced the serious problem of coordination at a level above the WPB. The head of the Office of Economic Stabilization, which agency had been made necessary as the result of need for coordinating wages and prices and the division of authority relative to the price of foods between the War Food Administration and the Price Administrator, was appointed in 1943 to head a newly established Office of War Mobilization. The various agencies concerned with war mobilization, including the Secretary of War and the Secretary of the Navy, were represented on a War Mobilization Committee; the Chairman of the Committee had broad authority to develop unified programs and establish policies for the maximum use of the nations' industrial resources for military and civilian needs; to develop plans for effective use of manpower; for economic stabilization; and generally to adjust the economy of war needs and conditions. While the priorities powers remained in the Chairman of the WPB, the Director of OWMR had authority to issue directives governing the use of such priorities.

b. Relationships between Military and Civilian Agencies during World War II.

In this area the military agencies determined military needs of supplies and equipment and translated those needs into requirements for resources, including raw materials, plants, tools, and labor. The War Production Board, on the other hand, reviewed these statements of military requirements, and attempted to relate them to capacity to produce and to adjust these requirements in the light of other requirements for resources necessary for the maintenance of an economy to prosecute a total war. Perhaps the principal difficulty in this connection was the inability of the military agencies to give WPB firm figures on requirements. A difficulty which apparently arose only in part from changes in our military strategy.

c. Placement of Contracts.

In general, the military services retained and exercised their responsibilities for placement of war contracts; to a degree they were rendered assistance in this function by the WPB in the identification of facilities for contract placement, distribution of contracts geographically, subcontracting sources, and in advising on procurement methods and procedures. Except for a short time during the war civilian agencies did not review or exercise authority over the contract placement functions.

d. Expanding Plant Facilities and Production Capacity.

The Plants Site Board and later WPB Facilities Committee attempted to determine the need for and the location of new plants, and necessity for expansion of existing plants. The Army and Navy were represented in these groups. After clearance by the Committee, the Army and Navy usually took the lead in expediting plant construction. The Army and Navy, with RFC and Defense Plants Corporation assistance, increased production capacity in military end item plants. WPB determined plants to be converted for military production but the military services did the conversion job.

e. Limitation on Non-Essential Civilian Production in Order to Conserve Resources for War Production.

This was accomplished mainly by WPB's issuance of limitation orders which affected a large number of civilian end products and their components. It had the effect of freeing materials, labor, and plant facilities for war production. Military agencies were concerned with the use of limitation orders; (a) to protect the production of civilian items which were important to support military activities; and (b) to advocate the use of limitation orders on items whose production interfered with the production of military items.

f. Allocation and Priorities Controls over Materials.

WPB through allocation controls, preference ratings, and the controlled materials plan channeled materials to munitions and other essential civilian production. In general, the military services distributed materials under general allotments from the WPB to their own prime and sub-contractors, whereas the WPB distributed materials to producers of common components and essential civilian items.

g. Production Expediting and Scheduling.

In general, the military services assumed responsibility for expediting production of raw materials, machine tools, general industrial supplies, and essential civilian items. WPB assisted the services in expediting military production through breaking supply bottlenecks through priorities assistance, engineering "know-how" and enforcement of priorities regulation. The War Manpower Commission, in cooperation with WPB, established a training within industry program. WPB stimulated the establishment of plant labor management committees to improve labor relations and increase production. In addition, WPB provided management consulting services to industry primarily to promote the adoption of wage incentive programs. WPB played an important role in refereeing competition between the procurement services for the capacity of individual plants through scheduling components and freezing schedules.

h. Conservation Program.

This function was designed to increase production within available materials and capacity and to promote the utilization of existing materials and facilities, labor and plant capacity. Although primarily a responsibility of the WPB, the military agencies again assumed responsibility with respect to the production of military end items. WPB issued periodic lists of critical materials to be used by the services in their conservation programs.

i. Redistribution and Control of Inventories.

WPB attempted to move frozen inventories and excess quantities of materials, tools, and equipment to plants producing urgently needed war munitions. The services conducted internal and interagency redistribution programs. In general, WPB established maximum limitations on inventory levels of critical materials and regulations for the sale of such materials.

j. Manpower Controls.

The War Production Board and the War Manpower Commission worked closely together in working out relations between production and manpower. The WPB periodically published the Production Urgency List in assisting the WMC in getting labor to points where it was needed most. The WPB also advised the Selective Service System in determining which workers were most essential in war industries.

k. Requisitioning of Plants and Materials.

WPB certified the need for requisitioning of materials and plants for war production purposes on actions initiated by the military.

l. Economic Stabilization.

While the Services had responsibility for contract pricing, the

Procurement Policy Board, chairmanned by the WPB and including representatives from the OPA, was authorized to issue governing policies.

m. Reconversion Planning.

Principal responsibility for reconversion planning was exercised by the WPB. Participation of the military services was required in order to give the civilian agencies advance notice of military cut-backs so that adjustments could be made in relaxation of orders and redistribution of labor forces and in the development of reconversion pricing policies. Two very important aspects of planning for the termination of hostilities are the settlement of war contracts and the disposal of surplus property. After extensive hearings the Congress passed legislation on both subjects and established central policy agencies to carry out the provisions of the statutes, an Office of Contract Settlement and a Surplus Property Administration.

### SECTION III

#### ORGANIZATION FOR PROCUREMENT - POSTWAR

##### A. WAR DEPARTMENT

- 23. GENERAL
- 24. UNDER SECRETARY OF WAR
- 25. DIRECTOR OF SERVICE, SUPPLY AND PROCUREMENT
- 26. OPERATING PROCUREMENT AGENCIES
- 27. RELATION OF RESEARCH AND DEVELOPMENT
- 28. ARMY AIR FORCES

##### B. NAVY DEPARTMENT

- 29. GENERAL
- 30. CHIEF OF NAVAL OPERATIONS
- 31. MATERIAL DIVISION
- 32. TECHNICAL BUREAUS

##### C. ARMY-NAVY MUNITIONS BOARD

- 33. A.N.M.B.

##### D. JOINT CHIEFS OF STAFF

- 34. J.C.S.

##### E. TREASURY DEPARTMENT

- 35. T.D.

### SECTION III

#### ORGANIZATION FOR PROCUREMENT - POSTWAR

##### A. WAR DEPARTMENT.

###### 23. General.

The Under Secretary of War has the primary responsibility for making procurement policies and directing the supervision of procurement and related matters. Research and Development has been assigned a greater relative value than before and is organizationally placed in a closer relation to the Under Secretary. The procurement functions are centralized in the Director of Service, Supply and Procurement. The numerous procurement and related functions formerly assigned to the Army Service Forces and the Assistant Chief of Staff, G-4 now became the mission of this Director. The main supervisory and coordinating job is centralized in his office and he holds the key position in the new procurement organization. The seven technical services which previously functioned as operating procurement agencies for the Army Service Forces are increased to eight by adding the Finance Department. These services continue their operating procurement activities with little change. The Army Air Forces likewise continues as an operating procurement agency for supplies and equipment to the Air Forces.

###### 24. Under Secretary of War.

The Under Secretary of War continues to head up the procurement organization in the War Department. He is charged with establishing policies for the direction and supervision of War Department activities concerned with procurement, industrial mobilization and demobilization, and other industrial matters related to procurement. He delegated the actual direction and supervision of procurement to the Director of Service, Supply and Procurement, who occupies the key supervisory position.

###### 25. Director of Service, Supply and Procurement.

There are centralized in the Office of the Director of Procurement, the various procurement and related functions formerly prescribed for the Army Service Forces, the Assistant Chief of Staff, G-4, and the Logistics Group, Operational Planning Division. Acting directly under the Under Secretary of War, this agency functions in a key position with the general mission of supervising and coordinating the procurement activities of the Air Forces and the technical services. Together with appropriate joint and combined agencies, the Procurement Director develops logistical plans for the Army and furnishes logistical planning guidance to other War Department agencies, the technical and administrative services, and the major commands. He advises and makes determinations and recommendations on the logistical aspects of current and future plans. He is specifically charged with:

a. Preparation of requirements for the supply of the Army on the basis of computed requirements submitted by the Army Ground Forces, and the technical services.

b. Determination of the items of equipment and supplies that are peculiar to the Army Air Forces, the Army Ground Forces, and the technical and administrative services, together with allocation to the Army Air Forces or to the technical services of responsibility for the procurement of all items of supplies and equipment used by the Army.

c. Establishment of purchasing and contractual policies and procedures, and preparation of the Army Supply Program and revisions thereof.

###### 26. Operating Procurement Agencies.

The technical services which functioned as operating procurement agencies under the Army Service Forces are raised in number from seven to eight by the addition of the Finance Department. Their function as regards procurement

is continued with little material change. Together with the Army Air Forces, these technical services continue to do the actual work of procuring for the Army under the supervision of the Director of Service, Supply and Procurement, who translates the broad policies of the Under Secretary of War into more detailed directives.

## 27. Relation of Research and Development.

Since research and development have been assigned a greater relative value, it is well to develop that angle. The present rapid rate of advancement of scientific knowledge and the impact of resultant devices and techniques on military procurement organizations lends especial interest in this field. The research and development organization has been attached directly to the Deputy Chief of Staff with the mission of assisting and advising both the Under Secretary of War, the Chief of this Research and Development Division is responsible for the initiation, allocation and coordination of research and development, the expeditious application of new or improved weapons, devices or techniques and the assurance of adequate provision for the mobilization of scientific, technical and industrial effort.

## 28. Army Air Forces.

### a. Headquarters Army Air Force.

The procurement organization of the Army Air Forces begins at Headquarters, Army Air Forces, where the plans of the Joint Chiefs of Staff are translated into general requirements for numbers and types of aircraft and tactical organizations. This is accomplished by A-3. Staff level supervision of procurement is through A-4, under policies of the Director of Service, Supply and Procurement.

### b. Air Material Command.

From Headquarters, Army Air Forces, the procurement channel leads to the Air Material Command, the action agency for implementing the procurement programs and policies. The Air Material Command is organized with T-1 to T-5's, which are the same as the old A's or G's. Under T-4 are the Supply, Procurement and Air Installation Division. The Procurement Division will negotiate; prepare, and administer all Army Air Forces contracts except local purchase. The field organization has changed from that on V-J Day. In place of the old four districts there are eleven field procurement offices and seven Air Forces plant representatives. This field organization was based largely on considerations of economy. It eliminates the housekeeping and administrative functions formerly performed in the district headquarters. These functions are now performed by existing offices either in the Headquarters, Air Material Command or the Air Material Areas. Direct contact is made from Headquarters, Air Material Command, with the active field personnel best able to take administrative action on contracts.

## B. NAVY DEPARTMENT.

## 29. General.

The Navy's procurement organization is the carrying forward of the functions administered by the V-J day organization. The Navy has broken the procurement problem into three phases. First the determination of requirements which is a function of the Chief of Naval Operations; second the coordination of the bureaus' purchasing, production, inspection and control, which is a function of the Material Division in the Office of the Assistant Secretary. (The Materials Division is the successor of the Office of Procurement and Material); and third the operating procurement function which is a task of the technical bureaus, with certain exceptions.

## 30. Chief of Naval Operations.

The Chief of Naval Operations is responsible for the determination of requirements. Within his office are six principal divisions of which the two divisions primarily charged with requirements are the Deputy Chief of Naval

Operations (Air) and the Deputy Chief of Naval Operations (Logistics). The Deputy Chief of Naval Operations (Air) is charged with the coordination of all military aspects of Naval aviation pertaining to policies, plans, and logistics. It has close liaison with the Deputy Chief of Operations (Logistics) in matters pertaining to aviation. The Deputy Chief of Operations (Logistics) is the real requirements-computing organization within the Navy Department. The Assistant Chief of Naval Operations for Material under the Deputy Chief of Operations (Logistics) is responsible for the fulfillment of material logistic requirements of the Navy, other than aviation.

### 31. Material Division.

The Material Division under the Assistant Secretary of the Navy is responsible for the overall supervision of policies in respect to the purchase function, production, inspection, and control. Close liaison is maintained with the Deputy Chief of Naval Operations (Logistics) to insure a well-planned and integrated procurement organization.

### 32. Technical Bureaus.

In general, the Navy bureaus' procurement organization is one based on the concept evolved during the war that a better purchase job can be done on some items by the respective bureaus doing their own procurement, including the purchase function. The Bureau of Ships, Bureau of Aeronautics, and Bureau of Ordnance include within their procurement organization a unit to administer the purchase function. The Bureau of Yards and Docks has reverted back to the old peacetime plan of the Bureau of Supplies and Accounts administering the purchase function. The Bureau of Medicine and Surgery has a joint procurement organization which brings together the Army and Navy medical supply purchasing under one command. The Bureau of Supplies and Accounts has been charged with the responsibility of procuring common items between two or more bureaus. Prior to World War II, it was made responsible for carrying forward the purchase function of procurement for the entire Navy, with certain exceptions. Even during the war, it purchased a great deal of warehousing stock, and all supplies, provisions, clothing, fuel, and other materials required by the Navy, except specific items which were procured by the technical bureaus. The Bureau of Supplies and Accounts procurement will fall along the same pattern as it was during the war, but on a greatly reduced scale. It isn't anticipated that the Bureau of Supplies and Accounts will revert to the role played by it in the prewar years in exercising the purchase function for the entire Navy.

## C. ARMY-NAVY MUNITIONS BOARD

33. The Army-Navy Munitions Board consists of the Under Secretary of War and the Assistant Secretary of the Navy and a civilian Executive Chairman appointed by them. The Executive Chairman shall be the Chief Executive of the Board and shall have two deputies, one being a general officer of the Army and one being an officer of flag rank of the Navy, to be detailed by the War Department and the Navy Department, respectively, for duty with the Board. A Policy Committee, consisting of the Chief of Staff, U. S. Army; the Commanding General, Army Air Forces; the Director, Service, Supply and Procurement Division, War Department General Staff; the Chief of Naval Operations (Air), and the Chief of the Material Division, Navy Department; shall meet with the Board when necessary, to consider and make recommendations to it upon all matters of major policy, and upon such other matters as may be referred to it by the Executive Chairman.

## D. JOINT CHIEFS OF STAFF.

34. The organization of the Joint Chiefs of Staff has not basically changed and still consists of a series of committees. The Joint Committees which have relations with military procurement are: The Joint Strategic Survey Committee, the Joint Staff Planners, the Joint Military Transportation Committee, the Army - Navy Petroleum Board, and the Joint Logistics Committee.

## E. TREASURY DEPARTMENT.

35. The procurement function within the Treasury Department is handled by the Procurement Division, which is a central agency. In accordance with Executive Order 6166 the Procurement Division may with the approval of the President, (a) undertake the performance of such procurement, warehousing, or distribution itself, or (b) permit such agency to perform such procurement, warehousing or distribution, or (c) entrust such performance to some other agency, or (d) avail itself in part of any of these resources, according as it may deem desirable in the interest of economy and efficiency. When the Procurement Division prescribed the manner of procurement, warehousing, or distribution of anything, no agency shall thereafter procure, warehouse or distribute such thing in any manner other than so prescribed. Director Order 73 stipulated the extent to which the Director of the Procurement Division would undertake to procure for Federal agencies or to procure specific types of supplies and services. However, this order specifically exempted the War and Navy Departments and the Marine Corps from the provisions of the order; nevertheless, in the future the Treasury Department may be made responsible for the procurement of all items common to Federal agencies, including the military services. It is obvious that this would be more economical.

SECTION IV

UNIFIED PROCUREMENT - POSTWAR

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  - 37. OPERATIONS OF THE ANMB
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## SECTION IV

### UNIFIED PROCUREMENT - POSTWAR

#### A. ARMY-NAVY MUNITIONS BOARD.

##### 36. General.

The Army-Navy Munitions Board is responsible for the development and expediting of joint procurement between the War and the Navy Departments, and is assigned policy control of all the joint agencies lying between the services where they concern themselves with matters of this nature. The long-range objective of the ANMB has been built on the following basic assumptions:

- a. All items common to the Army and Navy should be procured jointly or by one service.
- b. Uniform procurement policies and procedures should be developed for items not common to the two services.
- c. Items with substantially the same end use should be standardized.

##### 37. Operation of the ANMB.

The ANMB is not an operating agency. It attempts to achieve coordination by a general survey of the problem, determining what the need is in general, and attempts to devise a joint agency which will correct the thing that needs correction. In other words, if a committee is established to study standardization within a certain field, the order for that committee will be drawn up by the Army and Navy Munitions Board for the signature of the Secretaries; but that committee would not be composed of ANMB members. Another way in which it functions is by some supervision over the policies of such procurement joint agencies as already exist. That means that when an agency is started up, it should have in its purchase functions some sort of supervision. Obviously the ANMB is not in a position to exercise that supervision. So in a meeting with the joint agency it will be decided that in ordinary, routine administrative matters, the agency will be under the supervision of one of the military services; and likewise any other matter which has to be settled or accomplished is delegated to one of the services to perform. One of the joint agencies which is closely supervised by the ANMB is the Procurement Assignment Board, which has authority from the Under Secretary of War and the Assistant Secretary of the Navy to assign to any technical service of the Army or bureau of the Navy authority to purchase the entire needs of both services for specified items. It also has the authority to recommend standardization of items. This group has authority to examine all duplicated procurement, and where it is believed desirable, to recommend the proper assignment. It does not wait on joint specifications, it being possible for one department to buy items varying in characteristics where necessary. But the board will also point out to the joint specification agency cases where joint specifications are particularly desirable.

##### 38. Problem and Progress.

Real coordination in purchase and its related functions cannot be accomplished with a word or with a stroke of the pen. Necessary prerequisites are standardization of end products and components to the highest feasible degree. It requires similar procedures and policies in contracting, pricing, product inspection, and cost inspection. It requires identical timing in the purchase of large requirements of similar items, which in turn requires simultaneous stock review throughout the Services. Standardization of any item or class of items between the services must receive careful attention; for example, in a radar set of similar characteristics the Army must have dust protection while the Navy must have comparatively small size and resistance to gunfire shock. Many of these differences can be reconciled but the work of ironing them out will take several years. A considerable amount of progress

has been made. The volume purchase of food and lumber are integrated. In textiles and clothing, footwear, and petroleum products, there is close collaboration in the buying operation. Most notable progress has been made in the field of medical and surgical supplies. Here the services have not only established a joint buying office in New York, but have succeeded in standardizing roughly 85% of the items each of them use.

## B. THE JOINT CHIEFS OF STAFF.

### 39. General.

The Joint Chiefs of Staff still contribute to coordination of procurement between the services by insuring unification in the making of plans and the determination of requirements. There is no general basis or order for the operations of the Joint Chiefs of Staff and they still operate through the medium of committees.

### 40. Committees.

a. The Joint Strategic Survey Committee is the top Joint Chiefs of Staff committee. It is a very high ranking committee and is charged with broad strategy and with recommendations concerning national policy. The broad strategical concepts developed by that committee are, of course, the basis of all the other actions, operational and logistical, carried out by the Armed Services; so their actions have a direct bearing on military procurement. The strategic concept that they develop, however, is too broad to be of much use to procurement people other than to indicate certain items that might be needed in operations, and will not generally indicate timing nor will it indicate the size of forces. It will give such data as a decision of whether we attack Germany, whether we approach from the South or the North. In that way it will indicate whether Arctic equipment or tropical equipment is wanted, whether you are going to have a long line of communications required rolling stock, or whether it is going to be a short, small operations. The Joint Strategic Survey does not develop operational plans or detailed strategical plans.

b. The Joint Staff Planners come directly under the Strategic Survey Committee in the chain of developing plans. They are charged with the preparation of joint war plans and with plans concerning the combined employment of United Nations forces. They review all studies and plan of other Joint Chiefs agencies that are connected with military operation. In other words, if it might affect an operation plan, they review the paper and report to the Joint Chiefs concerning implications. They operate under the broad strategic guidance of the Strategic Survey Committee and with that guidance develop more detailed strategical plans and operational plans to carry out the broad strategic concept. They will go into some detail as to time of operations, which helps the procurement people, and as to the size of the combat forces needed for the operations, and some detail as to bases required to support the operations. The plans they turn out are the first real guide to procurement plans, but they must go through more planners before they become satisfactory for that use.

c. The Charter of the Joint Military Transportation Committee charges its representatives with being concerned with all matters concerning military overseas transportation and with coordinating Army and Navy overseas transportation requirements with those of other governmental agencies and of other nations.

d. The Army and Navy Petroleum Board is in one way a procurement agency. It has a dual status. It serves under the Army and Navy Munitions Board, which is charged with procurement coordination, as well as under the Joint Chiefs, and its plans and functions concerning procurement are carried out under the Army and Navy Munitions Board in accordance with policies cut out by that agency. This board is charged with effecting close cooperation between the services on all matters pertaining to petroleum, petroleum products and all associated matters, and it correlates and coordinates procurement and budgeting requirements. It determines strategic requirements for petroleum and petroleum products. It designates procurement agencies for the products, charging one service with all the procurement of a certain product.

It coordinates research and development and testing of petroleum and petroleum products. It coordinates distribution, storage, and issue and specifications and standards for these products. The Army and Navy Petroleum Board has a definite procurement responsibility in that it not only determines the requirements but assigns procurement agencies.

e. The Joint Logistics Committee is the primary logistical advisory and planning agency of the Joint Chiefs of Staff. It is charged with giving the Joint Chiefs the logistical aspects and implications of plans or commitments, with advising other agencies of the Joint Chiefs and of the War and Navy Departments of logistic plans and requirements, with developing logistical plans to implement strategical and operational plans developed by the War Plans Committee. In carrying out its functions, the Joint Logistics Committee is constantly studying problems relating to the availability of resources, or to requirements for resources. It has two responsibilities that are directly connected with procurement. First it is charged with preparing and maintaining an over-all logistical plan that will serve as guidance for the War and Navy Departments in developing their more detailed procurement plans. This document when it is put out, which is after the strategical plans have been developed, will be a guide to procurement programs in the services. Until it is developed the services and the Army and Navy Munitions Board will have to do what they did before and that is to estimate requirements unilaterally rather than with joint guidance. Second it is charged with the development of the logistical plan for a special operation. The war planners, in addition to their over-all strategical plan, will develop special plans for particular operations. Such a plan may consist of a divisional attack in a certain area. Now it is necessary to check that operational plan against the over-all plan to make sure that it can be done within the framework of over-all planning. The Joint Logistics Committee will develop logistical plans for these operations which can be sent down to the services, to check against their plans to see if these operational plans can be done within the board framework that has been developed.

#### 41. Relations with the Army-Navy Munitions Board.

Since the Joint Chiefs responsibilities in connection with procurement are mostly those of setting forth requirements and it is the responsibility of the Army-Navy Munitions Board is to insure coordination with industry, coordination of the procurement plans of the services, and to establish plans and policies for industrial mobilization, it is essential that coordination be affected between these two agencies. This is especially true as the Army and Navy Munitions Board reports directly to the Secretary of War and Navy and not to the Joint Chiefs of Staff. The Joint Logistics Committee has worked out the following procedure: The Strategical Survey Committee of the Joint Chiefs will develop its broad strategical plans. These will go down to the war planners, who will develop an over-all strategical and operation plan in some detail, setting forth forces required, bases required, and status of different bases. That in turn will come to the Joint Logistics Committee, which will develop the major requirements in a broad way for logistical support. Those requirements will be such items as the units required, that is, service units, as the war planners will give the combat units; the base development that will be needed to make the bases satisfactory for the mission assigned; the amount of shipping required to support the operation, including hospital ships for evacuation; petroleum requirements for all purposes and all of the major requirements on a broad basis. That plan will be referred to the War and Navy Departments for their study and for recommendations. It is intended that when the logistical plan gets to the War and Navy Departments it will go down to the organizations that compute the detailed requirements that is the technical services of the Army and the bureaus of the Navy. These technical organizations will make computations of end items needed to support the logistical plan, such as requirements of engineering equipment to construct bases and landing fields and weapons to equip combat forces. They will compare those over-all requirements with supplies that they will have available according to the time set forth in the plan, which will develop the number of end items that must be produced or procured from outside services. A schedule of requirements for procurement will then be submitted by the War Department and

by the Navy Department to the Army and Navy Munitions Board and they will coordinate the two schedules and develop their procurement and production programs. They will then check those programs, with the capabilities of industry and will go back to the War and Navy Departments with their comments as to the feasibility of the plan from a production and procurement viewpoint, pointing out any of it that they will not be able to produce, and recommending such action as they think will have to be taken to iron out difficulties. The War and Navy Departments will then review the requirements that they have set up with the view to such substitution as they can make or perhaps the cutting down some of the requirements on which they may have gone a little strong. The departments will then forward their comments and their recommendations to the Joint Chiefs for action. When the comments get to the Joint Chiefs, they will have to go in reverse through the agencies that they came down through to see what can be done about the troubles that have been developed. It may be that some of the end items that will be short could be produced if a sufficient priority is given to them and a lower priority given on some other item. It may be that the only solution is a change in the plans that have been developed. Certainly it is not realistic to count on a plan that you know procurement cannot meet. So there are the two probable solutions, either the assigning of high priority to some items at the cost of low priority to other items or the change of war plans. These questions will be studied by the Joint Logistics Committee, probably in collaboration with the Joint Staff planners and recommendations will be submitted to the Joint Chiefs. The Joint Chiefs will then act upon the recommendations and inform the War and Navy Departments as to what they intend to do to minimize the difficulties.

#### C. PROGRESS IN UNIFIED PROCUREMENT.

##### 42. General.

A great deal has been accomplished in the unification of procurement, especially in the field of purchasing. However, the greatest necessity today lies in the field of requirements, in the designation of items, in provision of an adequate catalogue, in contracts and contract procedures, and in the realm of standards, which includes specifications and all that it implies.

##### 43. Field of Accomplishments.

###### a. Commodity Field.

1. The Army and Navy have a joint purchasing agency in New York City to procure all Army and Navy medical and surgical supplies. They have also succeeded in standardizing roughly 85% of the items each of the use.

2. A high level joint Army-Navy Ordnance Committee, headed by the Chief of the Ordnance Department and Chief of the Bureau of Ordnance. This coordinating body is established to give formal cognizance to cross procurement arrangements; to study opportunities for further standardization; to correlate test, research and development projects; and to explore possibilities for joint specifications on many items, including those similar in end use but varying in details. The first meeting of this organization was held on 7 January 1946, and it is believed much headway will be made toward further agreement covering ordnance items, including uniform policies in transactions with contractors and extension of the program of single procurement of combined needs. Informal arrangements between the two chiefs in the past and present obtained a considerable degree of coordination as the Ordnance Department has always purchased and made all the small arms ammunition and powder for both services.

3. In the Quartermaster field of commodities the Army purchases for the Navy 95% of all its food. Although textiles and clothing are not purchased jointly, there is close coordination between the Army and Navy purchases through two adjoining offices in New York City. The Army and Navy Petroleum Board coordinates the requirements of the Army and Navy for fuel and lubricants.

4. The Central Procuring Agency staffed by Army and Navy officers purchases lumber nationally and allocates it between the Army and the Navy.

5. The Engineers Bureau of Docks Committee functions in the field of procurement of heavy machinery and construction machinery. This committee meets monthly, and has reduced requirements and procurement substantially by a careful check of the Army excess stocks against the current Navy procurement programs and vice versa, and has sponsored joint tests on research and development. The Engineers purchased on detailed specifications, having preferred models. The Navy bought on performance specifications, which tended to the use of standard commercial models. After prolonger discussion these differences are being resolved. The Navy has accepted the Engineers proposal that not less than two preferred models will be eligible under the specifications to be written. With this arrangement much greater headway should be made toward standardization of equipment and toward joint or single service procurement of combined needs.

6. Another joint committee is the Committee on Standardization of Internal Combustion Engines. This committee proposes the standardization of all combustion engines. The proposal to reduce the number of small horsepower engines from sixteen to seven or eight has been accepted by the Services. The big question is whether automotive engines should be included in this committee's field. The inclusion of automotive engines would also require a revision of the types of vehicles, and there would be many ramifications which this problem would involve. Marine and aircraft engines should definitely be excluded. This problem of whether automotive engines should be included is now being worked on by the committee.

7. The Army Air Forces and Bureau of Aeronautics cooperate effectively on their requirements for airframes, engines, propellers, etc. Likewise they coordinate on high octane gas but a great deal of coordination is still needed on common supply items such as sheet metal.

8. The Joint Communications Board function during the war on coordinating electronic requirements and it is believed the Army-Navy Munitions Board will require this Board to function in peace time if it hasn't already done so.

9. Since the Navy has a very small Chemical requirement little coordination has been necessary. No records were found as to whether the Chemical Corps procured gas masks for both services but if they don't, the ANMB will probably assign the Chemical Corps as the procuring agency.

#### b. Functional Field.

1. Allocation, requirements, planning, facilities, construction, machine tools, priorities, etc., will be the responsibility of the Army and Navy Munitions Board to insure they are included in the Industrial Mobilization Plan. At present these functions are not serious enough to deem action, however, if they do become important or duplication becomes evident the ANMB will take the necessary action.

2. With reference to the development of specifications in August 1945, the two departments approved the establishment of a Joint Specifications Board with representatives of all bureaus and technical services. Also there is a Joint Specifications Council composed of four top-ranking officers from the two departments. This council is a general policy agency, more or less a court of appeals. Joint specifications have been undertaken on about nine hundred products, with approximately 250 approved by April 1946. A study has revealed that a minimum of three thousand important items exist on which agreement should be reached between the two departments. The Joint Specifications Board has approved a five-year program, with achievement quotas for each month. Allied with this study is a study in the departments to determine a method of standard drawing practices. That is a condition precedent to accurate specifications. Joint specifications must also include definite agreement on materials and component parts, which is a very complicated process. The importance of this work cannot be over stressed, and special emphasis has been placed on contacts with those bureaus and services where current contracting volume is

small and they, therefore, should now have ample time to address themselves to this problem.

3. In the field of packaging an Army-Navy Packaging Board was established in 1945. On the Army side the membership was composed of officers assigned to the Army Packaging Board, and coordination with the Navy was achieved by making certain that policies established in the War Department were in accord with those in the Navy and vice versa. A five-year program of specific objectives in the packaging field has been set up by the Packaging Board, and, with the cooperation of individual services in attacking this problem substantial savings should result. The Packaging Board works in close cooperation with the Specification Board as the latter establishes specifications for packaging material.

4. The sponsorship of legislation to develop a uniform and standard catalogue is in the hands of the Bureau of the Budget. There is a dire need for such a catalogue, as for example, the Army Quartermaster Catalogue in Class 53 materials lists paper, stationary and office supplies. The Navy catalogue on similar materials includes only about ten percent of items which can be determined from an examination of the two catalogues to be definitely the same. There should be a much greater degree of standardization. One of the ways in which to get around standardization is by developing a uniform nomenclature and descriptive pattern. In other words, in describing a kind of paper that is used by both services, it should be decided how to describe it and both describe it the same.

5. In inspection much progress has been made since the end of the war in coordinating inspection activities between the War and Navy Departments. Due to reduction in procurement volume duplicate personnel in many plants have been eliminated; and this program has been given considerable impetus by constant effort on the part of both Service to extend cross inspection. Regular meetings of the War Department Inspection Advisory Council are attended by representatives of the Navy. A complete compilation showing inspection districts of the technical services, the Army Air Forces, and the Navy Department has been released, so that it can be readily determined as to which inspection department of the particular service involved will be most suited to serve that locality.

6. There is a great need of uniformity in stock control procedure, and perhaps of inventory procedure, the stock control of inventories. In other words, coordinate the procurement of paper and chemicals between the War and Navy Departments. If that coordination is to be successful, the Services must be determining their requirements at the same time. They must survey their procurement needs, how much they want to buy, how much they have in excess, and must get together and go into the market and buy at the same time. That means agreement on the procurement lead time, so that they present a uniform problem to the manufacturer and the bidder.

7. Very little has been done to date on the establishment of uniformity between the services on policies and procedures involving contracts. A committee study made at the Army Industrial College recommends that a joint Army-Navy manual should be prepared, setting forth uniform accounting and auditing policies and procedures to be used in connection with government contracts. This problem will be considered by the Army-Navy Munitions Board as one of its responsibilities, and will be studied by the Procurement Policy Board.

8. In the field of contract renegotiation there has been a very notable success in coordination as to policy, procedure and even in the details of forms. The high degree of uniformity and coordination resulted from a series of successive steps. Even in 1942, when the Renegotiation Act was first passed, informal coordination was effected by assignment of each contractor subject to renegotiation to the Department and to the service having predominant monetary interest in the contractors total business for a previous year. Informal meetings between the Under Secretaries and Price Adjustment Boards of the two Departments and the adoption of a joint statement of principles carried coordination further. Statutory authority and responsibility for coordination of renegotiation policy and procedure resulted from the creation, in February

1944, by Congress of a War Contracts Price Adjustment Board.

9. Coordination as to contract termination policies and procedures has been highly developed. In 1944 the War and Navy Departments decided to adopt a single set of instructions applying both to Army technical service and Navy bureaus involved in contract termination. In November 1944 the Joint Termination Regulations and the Joint Termination Accounting Manual were issued and efforts were made to insure uniform interpretation of the Joint Regulations. The regulation provides for a consolidated termination program whereby selected contractors are assigned to a particular War Department technical service or Navy bureau for field accounting review and for disposition of termination inventory.

10. In the field of surplus property disposal both Departments are subject to the Surplus Property Act of 1944, and the regulations of the War Assets Administration. As a result, the Departments follow the same price policy and report their surpluses to the same disposal agencies according to the same regulations.

#### 44. Difficulties.

There are a great many difficulties involved in the problem of coordinating procurement between the Services. The lack of personnel properly trained in procurement has added to the task of obtaining coordination. Men in the Army and Navy very seldom have a chance to get experience, except in a classroom, to handle problems of logistics. Officers who have shown a capacity in the procurement field, should be trained for it. They should not be rotated afterwards but should be encouraged to make procurement their life work. Reserve officers can be used to handle the top jobs of procurement in the field because of their knowledge of business, but the field of procurement planning, policy making, and guiding should be put into the hands of career men. These men should come from the services mainly because the men who are doing the procuring must have the confidence of the men who are using the tools. When each service develops its own procedure to start with and puts it into effect and then tries to reconcile the differences, it is a very difficult job. Honest difference of opinion on all levels from top to bottom as to procedure adds to the problem. Uncertainty as to the size and composition of the Army and Navy and the outcome of Merger Plans also contribute to making coordination more difficult.

#### D. FUTURE PLANS.

##### 45. General.

A future war, regardless of whether it is a giant consumer of the industrial resources of our country or one of brief duration resulting in the destruction of our industrial resources, will call for plans which will give us the most economical and efficient use of our industrial capacity.

##### 46. Civilian Agency.

It has been argued that the placement activities in a civilian agency would free the military for singleminded attention to war strategy. It is also argued that in another war when materials may be far more short than they were in World War II, it will be necessary to place the procurement responsibility in a single agency to provide a more precise relationship between changes in design, procurement, and production scheduling if we are to obtain the maximum use of materials, manpower, and facilities. It is further argued that only in this way can proper balance between the needs of the various services and the civilian need be achieved. In the opinion of Baruch and Nelson these arguments are far outweighed by the need for a day-to-day relating by the military of changes in design, specifications, and requirements to meet technical improvements and battlefield strategy. The sense of urgency which is placed upon an agency for fighting a war could probably never be fully transferred to a civilian procurement agency. While a procurement agency undoubtedly must adjust its program to meet over-all production deficiencies, changes in production schedules, etc., these factors can best be

translated into specific teams by the Services rather than by a central procurement agency. At the same time, however, if materials are short, there must be some effective method for the central procurement agency to review contracts on a current basis and to be in a position to require cutbacks in specific contracts if necessary. Without this, over-extension of available materials could very well result in partial completion of a number of programs and the consequent delay in the completion in programs of equal or greater importance. Therefore how much control would be exercised by a civilian agency over such matters as military requirements, designs, specifications, scheduling of common components and scheduling of military end items. The principal argument in favor of maximum control in these areas by the civilian agency is the need to balance competing military demands with each other and particularly to balance the military against competing civilian requirements. The civilian agency should be in a position to question the desirability of frequent changes in design and specifications which may not add materially to the value of the product. It is extremely difficult, moreover, for a civilian requirements agency to determine the needs of the Army in relation to the Navy and Maritime Commission for steel except in terms of the scheduling of common components and military end items. The civilian claimant agencies, moreover, in presenting requirements for such matters as housing, transportation, farm machinery, etc., would never feel that one claimant such as the Maritime Commission, the Army, or the Navy, is completely aware of the importance of their respective areas to the war effort. The question of the extent of civilian versus military control of requirements, specifications scheduling, and contract placement is one of the most difficult in the entire field of organization. Even if the military had competence to do so, it could not persuade the public or industry that its judgment on the need for civilian goods is equal to that of a civilian agency. Some sort of organization for purposes of coordinating must be built around a central civilian agency and must include the opportunity for all claimant agencies to exchange views. Also the civilian agency to effectively determine among competing claimants for materials or upon production schedules must have a fairly close knowledge of the plans of the military with respect to over-all strategy.

#### 47. Strauss - Draper Report.

The basic recommendation of the Strauss-Draper report on improving procurement between the War and Navy Departments is as follows: "accordingly we have reached the conclusion that what is needed in the procurement field is the establishment at the department level of a staff organization patterned after the Joint Chiefs of Staff, to insure uniform policies and procedures and to further coordination between the several services and bureaus. To the extent feasible such staff organization should not be a mere coordination agency added to similar staffs in both departments, but should be a joint agency, charged with responsibility for establishing common practices and policies in the areas assigned to both departments and for insuring that such policies are carried out. As pointed out below, there are certain procurement functions which we are not ready to recommend be assigned to such staff organization. As to such functions, however, such a staff organization should be charged with responsibility for further coordination between the two departments. Furthermore, this organization should be responsible for promoting coordination between the procurement activities of the various services and bureaus at the operating level. To be effective this staff organization must integrate this procurement organization with the rest of the supply organizations of the departments. The field of procurement covered by this report, from design through purchase, production, and delivery to the Government, is largely distinct from the other aspects of supply; but is cannot be left wholly independent. It is necessarily related to the subsequent storage, distribution, transportation, issue and maintenance of equipment. After it is delivered to the Government. Therefore, in order to achieve proper integration, such staff organization must be composed of those whose responsibilities cover the whole field of supply. We believe that the establishment of a joint procurement assignment board will make available perhaps the most effective mechanism for furthering coordination between bureaus and services at the operating level."

#### 48. Industrial College Committee Report.

The following report was submitted in the subject, Future Industrial Mobilization, written by the Coordinating Committee at the Industrial College of the Armed Forces.

#### 1. Military Munitions Board.

a. This board would be composed of a civilian chairman, nominated by the President for approval by the Senate, the Under Secretary of War, the Under Secretary of the Navy, and the Under Secretary of Air if an Air Department is established. The Board would be supported by an executive committee made up of the three chief military officers in each of the services (Army, Navy and Air) responsible for procurement, production, and storage policies and procedures.

b. The Military Munitions Board, like the Joint Chiefs of Staff, would be a staff, and not an operating agency. The Board would be responsible for preparation of the military portions of economic mobilization plans; formulation of joint procurement policies and procedures; and consolidation of requirements from Army, Navy and Air for presentation to Joint Chiefs of Staff.

c. The Military Munitions Board, in discharging the duties listed above, would require a permanent secretariat, statistical group, and planning board. The secretariat would prepare the agenda for the Board, maintain records and correspondence files, and provide secretarial assistance to the working committees. The statistical group would be charged with the formulation of standardized joint statistical control methods and procedures, such as supply, inventory, reporting, etc., and with the preparation of joint publications containing presentations of consolidated requirements programs, inventories, and storage reports. The planning group would prepare the military portions of the economic mobilization plan, including plans for the operation of strike-bound plants or plants operated by inefficient management, and those plans for demobilization and reconversion as pertain to the military.

d. It is envisioned that the greatest portion of the work performed within the Military Munitions Board could be completed by part-time committees, as was done during the war by the Joint Chiefs of Staff. These working committees would be responsible for preparing for consideration by the Military Munitions Board joint policies and procedures with respect to: contract forms, contract auditing, contract appeals, contract adjustments, contract placements, contract renegotiations, contract terminations, purchase and pricing, assignments of procurement responsibilities, insurance, performance and payment bonds, financing of production, patents, common specifications; facilities, scheduling, production control, manpower, packaging, packing and marking, conservation, item identification (cataloging) inspection, allocation of materials, storage, distribution and issues, disposal of surplus property, and priorities. These committees should make full use of the studies and reports completed by the Industrial College of the Armed Forces when formulating their policies and procedures.

e. The policies and procedures agreed upon by the Military Munitions Board would be forwarded to the War and Navy Departments (and to the Air Department if established) for implementation and enforcement. In the event of disagreement by the service members of the Board, the decision of the Chairman would be final. It will be noted that the Departments are the operational organizations in the chain of command, and are the responsible agencies for enforcing and implementing the decisions of the Military Munitions Board. It is the considered opinion of the Coordinating Committee that any organization pattern which removes procurement control from the agencies responsible for the design of military equipment is foredoomed, and in an emergency, would be destined for failure. This opinion is based on a careful study of World War II procurement which disclosed the essentiality for the design agency to follow all of the procurement steps from design through production to assure that the end items conformed with the military characteristics as defined by the using arms or services.

#### 48. Effect of Atomic Energy and Guided Missiles.

Atomic energy and guided missiles will have two pronounced effects on unified procurement, first in the commodity field and second in the field of industrial demand. Present day experiments find the Army, Navy and Air deeply interested in guided missiles as bought out by tests of the German V-2 at White Sands and statements in the press. The importance of guided missiles

to the services was illustrated vividly by the battle between the Army Air Forces and the Ordnance Department for the responsibility for research, design and development of guided missiles. An Air Force General stated that the life or death of the army air Forces depended on them obtaining this responsibility. This all sums up to the point that all services are interested in a single weapon which means that sooner or later all services will have as the basis of their fighting arm the guided missile rather than the airplane, ship and gun. Hence we have a common commodity as the principal procurement element of all services and a single procurement agency can easily be established. As long as the services have different commodities as their principal procurement demand, unified procurement will never be accomplished in its entirety. The effect of atomic energy can be approached from an Ordnance viewpoint. In the determination of requirement the result to be obtained is first considered. As in the planning for the requirement of the number of bombs needed in the European Theater, all possible enemy targets were determined and then taking the power and effect of bombs to destroy these targets, the requirement of the number of bombs needed was produced. This requirement, including the British, amounted to some 15 million bombs. Now if we take into consideration the power and effect of the atomic bomb this requirement is reduced to ten thousand. The production effort needed for ten thousand atomic bombs may or may not be as great as the effort required for 15 million TNT bombs but the forces needed and the time element required to deliver 10,000 atomic bombs compared to 15 million World War II bombs would be so small that consequently the production effort would be greatly reduced enough to overcome the difference in bomb production. In concluding, from the above analysis, actually little production is needed to produce the fire power necessary to enforce our will upon or destroy the enemy. Consequently the procurement problem becomes small and unification simple. This does not take into consideration that Irving Langmuir, one of America's most distinguished industrial scientists, wrote that it is probable that discoveries will be made by which production cost of the bombs may be greatly reduced, or new type bombs may be devised thousands of times more powerful.

SECTION V

CONCLUSIONS AND RECOMMENDATIONS

- A. CONCLUSIONS ON ORGANIZATION FOR PROCUREMENT
- B. CONCLUSIONS ON UNIFIED PROCUREMENT
- C. RECOMMENDATIONS ON ORGANIZATION FOR PROCUREMENT
- D. RECOMMENDATIONS ON UNIFIED PROCUREMENT

## SECTION V

### CONCLUSIONS AND RECOMMENDATIONS

#### A. CONCLUSIONS ON ORGANIZATION FOR PROCUREMENT.

27. The present line of action of procurement, originating in the plans of the Joint Chiefs of Staff, coordinated by the Army and Navy Munitions Board, further coordinated by the planning divisions of the War and Navy Departments, and ending with the procuring by the Technical Services, the Bureaus, and the Army Air Force, is sound.

28. The Joint Chiefs of Staff or a similar organization is mandatory to insure the proper coordination of the Military services in planning for procurement.

29. The Army-Navy Munitions Board or similar organization is mandatory to insure the proper coordination of the military services in actual procurement and in their relations with industry.

30. Within each service procurement is recognized as an important function but none has organized functionally so that the procurement of all commodities or products is done by one agency.

31. Procurement organization must continue to recognize commodity differentiations.

32. The Bureaus, Technical Services and Army Air Forces are efficient and effective purchasing and production agencies.

33. The centralization of procurement in Washington is sound.

34. The organization of the military services with reference to procurement and related functions should be such as could be readily expanded from a peace to war basis. To prevent experimentation and improvisation after an emergency arises the procurement organization should not be merely planned but should actually function in peace time.

35. There is no one best organization applicable to the entire field of military procurement.

36. The procurement activity of the military services should not be placed entirely in the hands of a civilian agency.

37. Every phase of America's industrial life should be directed by one or more organizations to mobilize efficiently in time of war.

38. Far more significant than mere organization are the personalities involved and the powers given to them. Poor organization furnishes the background for waste, conflict of authority, struggles for power, and inefficiency. But human beings give the life and realism to an organization rather than detailed line Charts. This is an important criterion. Cognizance of this fact must be taken and consideration given to the training of personnel for procurement.

#### B. CONCLUSIONS OF UNIFIED PROCUREMENT.

39. Most joint or coordinated procurement during World War II was the result of expedients, personal initiative, or the actions of boards and committees. It was achieved to meet specific problems and followed no consistent pattern.

40. The principle of solving joint procurement by committee or board action is sound as no one organization can possibly coordinate the entire field of procurement.

41. The long range policy of joint procurement should be that any item common to all services should be procured by one service.

42. The Joint Chiefs of Staff and the Army-Navy Munitions Board are essential to unified procurement.

43. The unification of standards and specifications are the initial steps in solving the problem of joint procurement.

44. There must be a preplanned system to allocate facilities and materials to obtain equalization between the procuring agencies.

45. There should be a common catalogue of all Army and Navy items, and this catalogue should as far as possible correspond to the terms by manufacturers and sellers.

46. Governmental contract placement procedures should be standard for all purchasing agencies.

47. The standardization of government contract forms is essential to insure benefit to purchasing agencies and contractors.

48. There should be uniformity between the services in the policies and procedures of pricing, accounting, auditing, appeals, patents, insurance and financing.

49. The military services should have an uniform inspection service, based on the Navy Department's system.

50. There is a great need of uniformity in stock control and inventory procedures of the service.

51. Civilian agencies with military service representatives should control the systems of allocating transportation, power and fuel, strategic and critical material, foreign resources, production, machine tools, manpower and priorities.

52. The Contract Settlement Act of 1944, applying to War Contracts only, provides an excellent example of carefully planned and prepared legislation which served, to a high degree, all the purposes for which it was intended.

53. To obtain conservation in time of war and peace and to stay within our production ceiling in time of war, unified procurement of the military services is indispensable.

#### C. RECOMMENDATIONS ON ORGANIZATION FOR PROCUREMENT.

54. That organizational changes be made to provide competent guidance with respect to practicability and feasibility of procurement to the strategic planners coincident with the development of their plans.

55. That the Joint Chiefs of Staff be continued as a permanent agency for the determination of national strategic requirements on which the War and Navy Departments can base their procurement objectives.

56. That no reorganization be made that would transfer the authority and responsibility for actual procurement of munitions from the technical services and bureaus of the armed forces.

57. That the Army-Navy Munitions Board be continued as a permanent agency for the coordination of procurement between the War and Navy Departments.

58. That the centralization of procurement in Washington be continued.

59. That so far as practicable, the peacetime procurement organizations be based on organizational requirements for operation under full scale industrial mobilization, and be capable of rapid expansion without necessity for major structural changes.

60. That the activity of procurement should not be placed in one organization.

61. That the procurement activity should not be placed in a civilian agency.

62. That civilian agencies should be created in emergencies to direct the mobilization of all phases of industrial life.

#### D. RECOMMENDATIONS ON UNIFIED PROCUREMENT.

63. That men be regularly trained in the procurement system and routine, in order to build up a nucleus of an emergency logistics organization that can be quickly expanded.

64. That the achievement of joint or unified procurement be placed on a continuing basis.

65. That the committees and boards established to unify procurement be made permanent organizations.

66. That the policy of unified procurement be to eliminate all duplications of purchases of similar items.

67. That the Army-Navy Munitions Board be placed at the same level as the Joint Chiefs of Staff.

68. That the committees on joint standards and specifications be continued and given the authority to direct changes in any agency.

69. That the Army-Navy Munitions Board contain in their Industrial Mobilization Plan a preplanned allocation of facilities and materials for the procuring agencies in case of an emergency.

70. That a common catalogue be established for all Federal agencies.

71. That contract placement procedures and forms be made standard for all Federal agencies.

72. That manuals be written and enforced so that the policies and procedures of pricing, accounting, auditing, appeals, patents, insurance, and financing, will be standard for all Federal agencies.

73. That one inspection service be established for each Federal agencies and that the inspection services coordinate their activities to eliminate duplication.

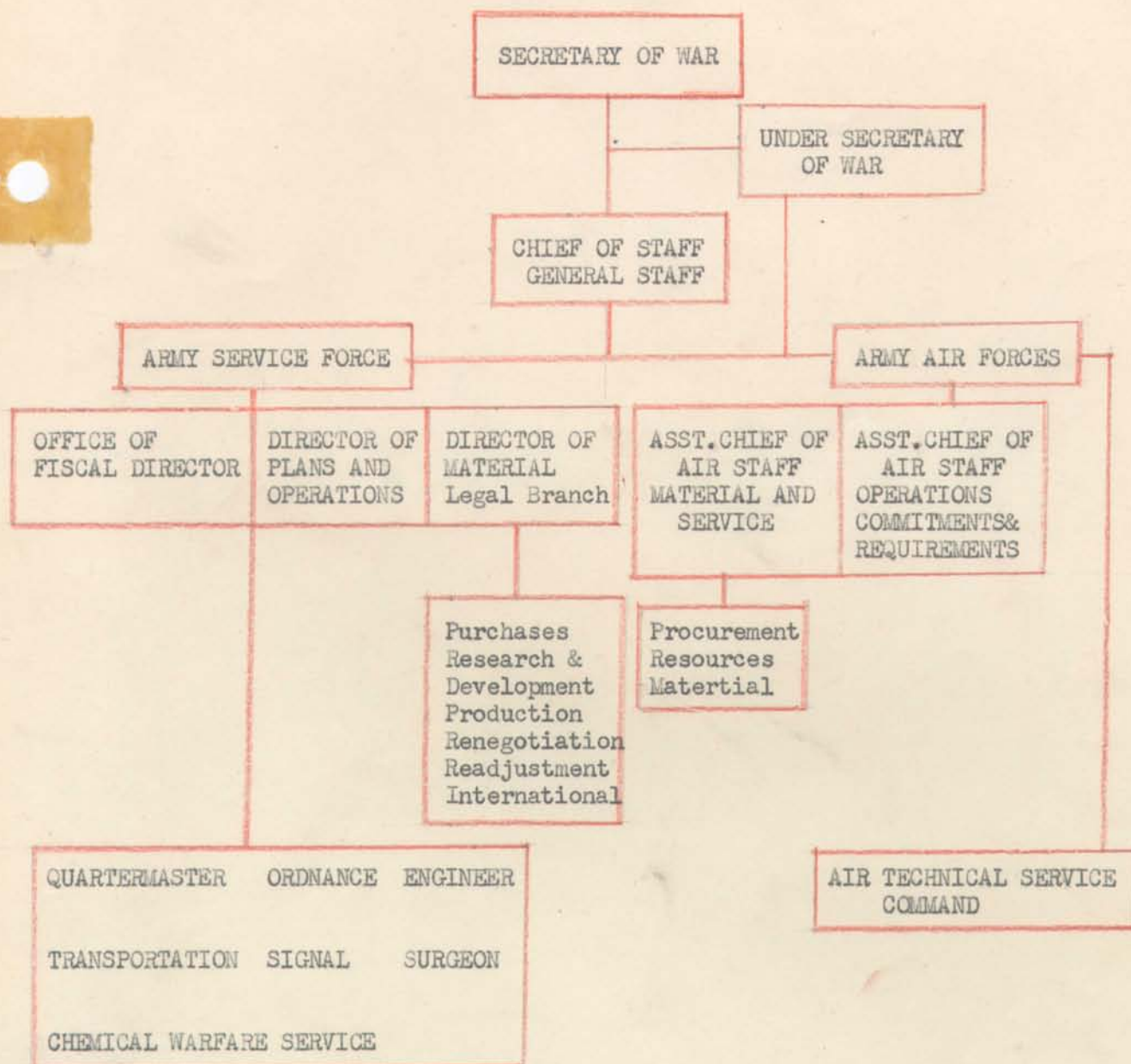
74. That the stock control and inventory procedures of all Federal Agencies be standard.

75. That the military services plan the Civilian agencies which in emergencies will control the allocation of transportation, power and fuel, strategic and critical materials, foreign resources, production, machine tools, manpower, and priorities.

76. That all essential legislation be prepared in advance of an emergency to insure that the demand on industry is presented and controlled in the most efficient manner.

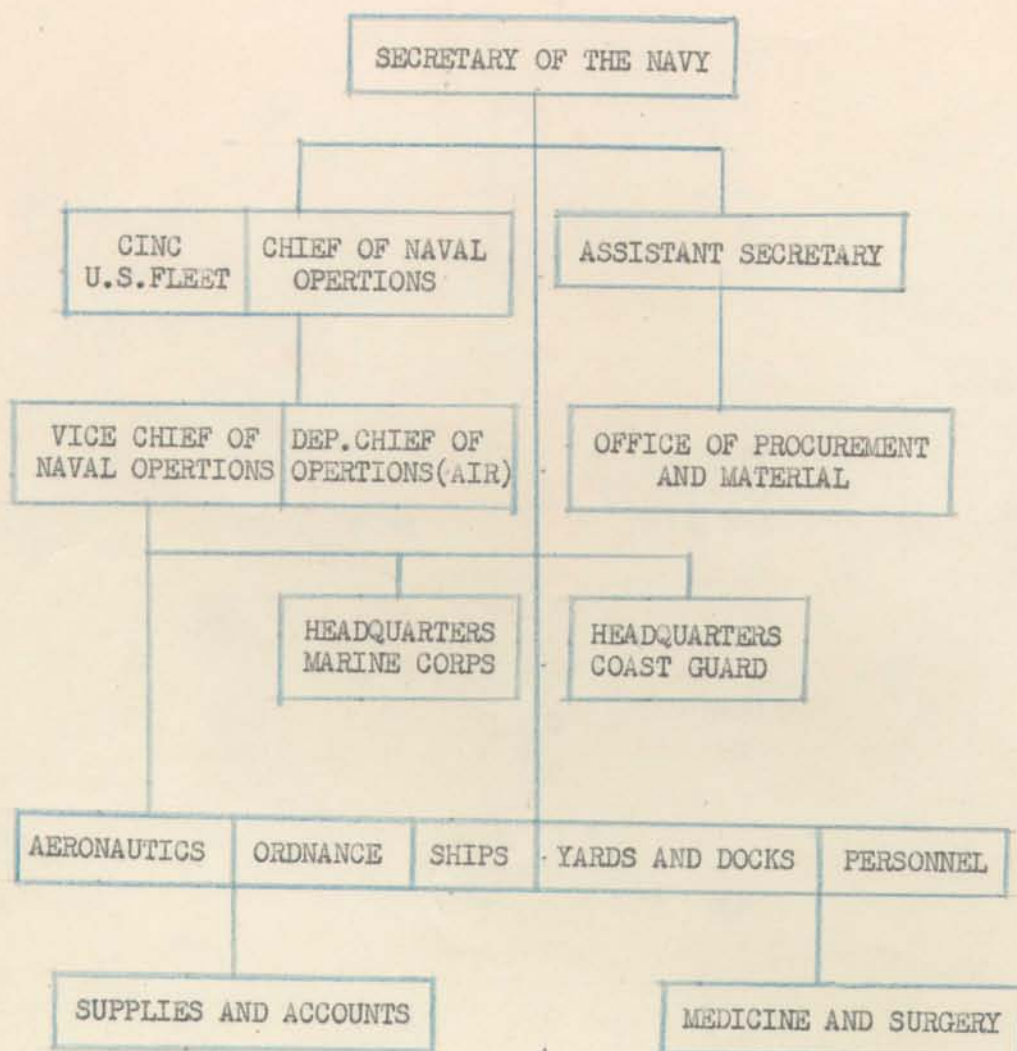
77. That all possible means of conservation be enforced.

## THE WAR DEPARTMENT

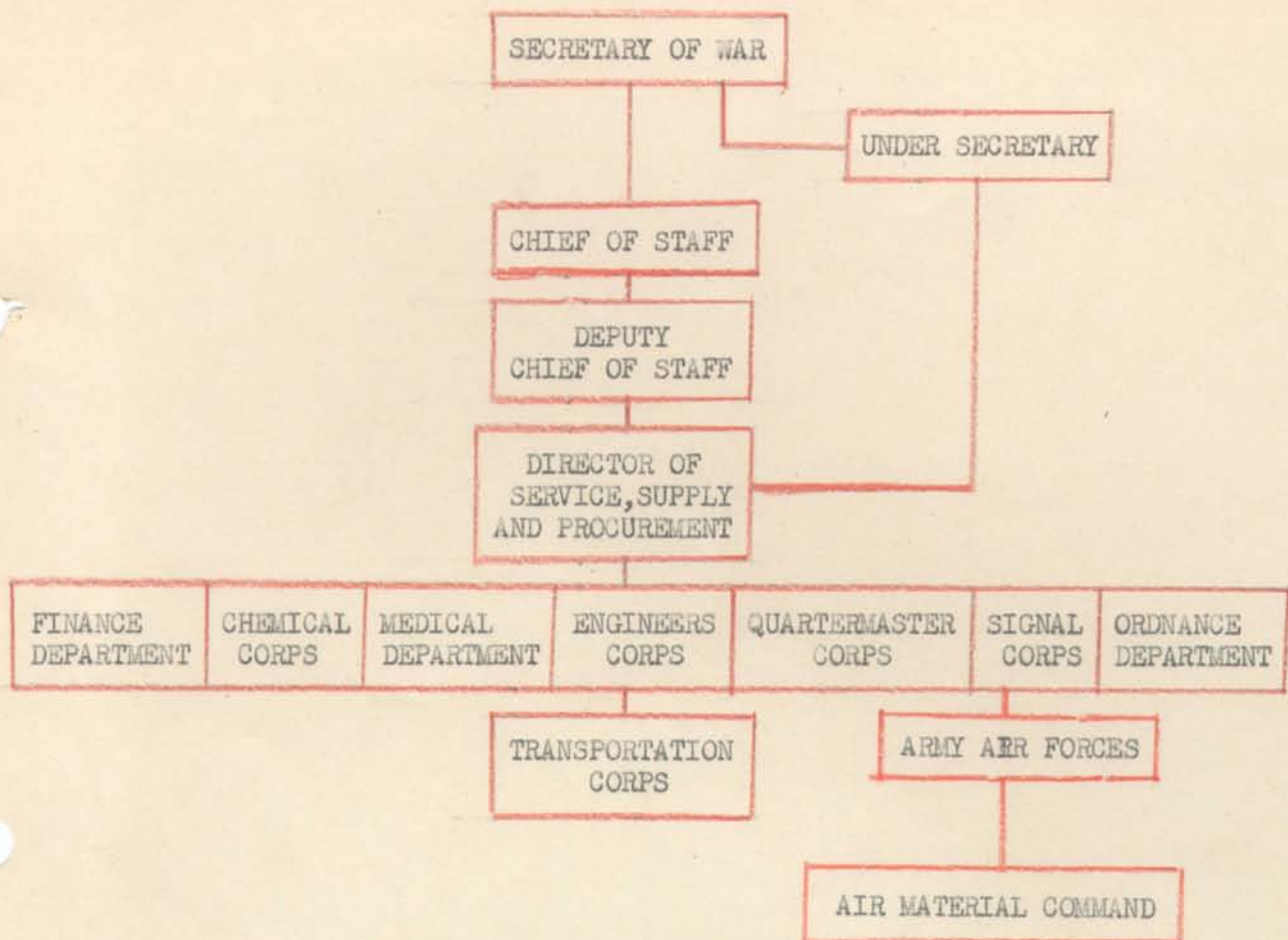


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## THE NAVY DEPARTMENT

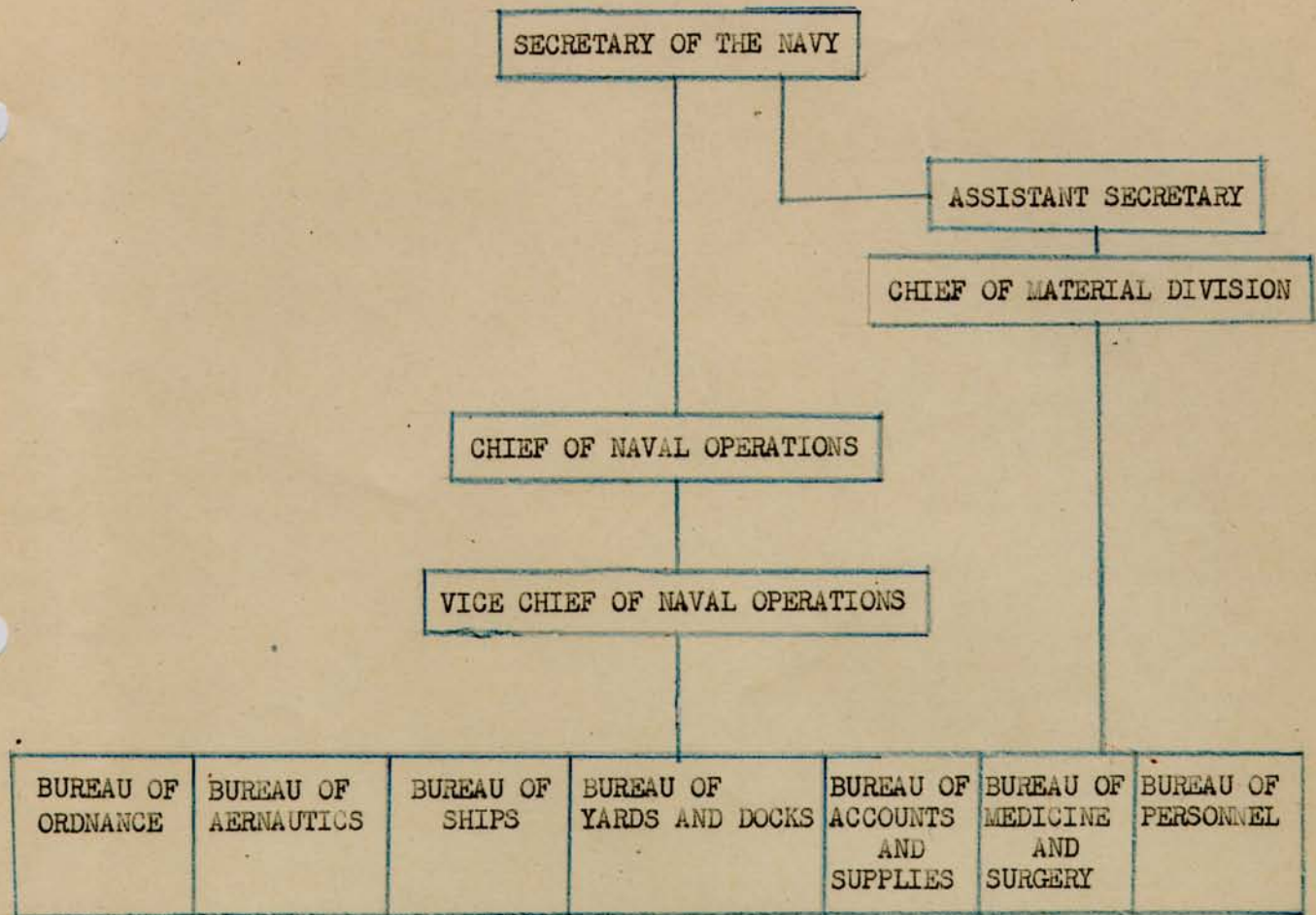


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## NAVY DEPARTMENT



ORGANIZATION FOR PROCUREMENT-POSTWAR

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